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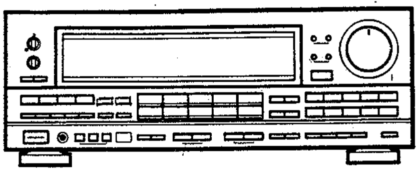
The future of sound and vision.

Service Manual



ORDER NO.
ARP1596

AUDIO/VIDEO STEREO RECEIVER

VSX-9300S
VSX-7300S
VSX-7300

VSX-9300S,VSX-7300S/KUC,SD/G AND VSX-7300/KUC HAVE TWO VERSIONS:

Type	Applicable model			Power requirement	Destination
	VSX-9300S	VSX-7300S	VSX-7300		
KUC	○	○	○	AC120V only	U.S.A. and Canada
SD/G	—	○	—	AC110V,120V–127V,220V, 240V (Switchable)	U.S.Military

- This manual is applicable to the VSX-9300S/KUC,VSX-7300S/KUC,SD/G and VSX-7300/KUC types.
- As to the VSX-7300S/KUC,SD/G and VSX-7300/KUC types, please refer to pages 79 .
- For the VSX-7300/KUC type is attached to standard type remote control unit, while for the VSX-7300S/KUC type is attached to programable remote control unit.

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CONTENTS

1. SAFTY INFORMATION ························· 2
2. PACKING ······································· 3
3. EXPLODED VIEWS AND PARTS LIST ······ 4
4. IMAGE DIAGRAM ···························· 7
4.1 VIDEO SECTION
4.2 AUDIO SECTION
5. SCHEMATIC DIAGRAMS AND P.C.BOARD PATTERNS ······················ 12
5.1 OVER ALL SCHEMATIC DIAGRAM
5.2 CONTROL A, CONTROL B AND METER AMP ASSEMBLY
5.3 AF, HEADPHONE, MOTOR-VOL TERMINAL ASSEMBLIES
5.4 PRO LOGIC ASSEMBLY
5.5 VIDEO/SURROUND/CONT (1/2) AND REAR AMP ASSEMBLY AUDIO SECTION VIDEO/SURROUND/CONT (2/2) VIDEO SECTION
5.6 TUNER ASSEMBLY
6. ELECTRICAL PARTS LIST ···················· 56
7. ADJUSTMENTS ······························· 62
8. REMOTE CONTROL UNIT ···················· 65
8.1 EXPLODED VIEWS AND PARTS LIST
8.2 ELECTRICAL PARTS LIST
8.3 SCHEMATIC DIAGRAM
8.4 P.C.BOARD PATTERNS
9. IC INFORMATIONS ··························· 70
10. CIRCUIT DESCRIPTIONS ···················· 75
11. FOR VSX-7300S/KUC, SD/G AND VSX-7300/KUC TYPES ···················· 79
12. PANEL FACILITIES ·························· 82
13. REMOTE CONTROL UNIT ················· 89 LEARNING FUNCTION (Programmable remote control unit only)
14. SPECIFICATIONS ···························· 92

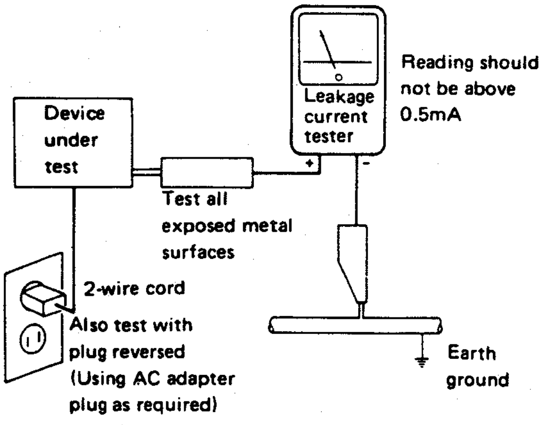
1. SAFETY INFORMATION

1. SAFETY PRECAUTIONS

The following check should be performed for the continued protection of the customer and service technician.

LEAKAGE CURRENT CHECK

Measure leakage current to a known earth ground (water pipe, conduit, etc.) by connecting a leakage current tester such as Simpson Model 229-2 or equivalent between the earth ground and all exposed metal parts of the appliance (input/output terminals, screwheads, metal overlays, control shaft, etc.). Plug the AC line cord of the appliance directly into a 120V AC 60Hz outlet and turn the AC power switch on. Any current measured must not exceed 0.5mA.


Device under test
Leakage current tester
Reading should not be above 0.5mA
+
-
Test all exposed metal surfaces
2-wire cord
Also test with plug reversed (Using AC adapter plug as required)
Earth ground

AC Leakage Test

ANY MEASUREMENTS NOT WITHIN THE LIMITS OUTLINED ABOVE ARE INDICATIVE OF A POTENTIAL SHOCK HAZARD AND MUST BE CORRECTED BEFORE RETURNING THE APPLIANCE TO THE CUSTOMER.

2. PRODUCT SAFETY NOTICE

Many electrical and mechanical parts in the appliance have special safety related characteristics. These are often not evident from visual inspection nor the protection afforded by them necessarily can be obtained by using replacement components rated for voltage, wattage, etc. Replacement parts which have these special safety characteristics are identified in this Service Manual.

Electrical components having such features are identified by marking with a ⚠ on the schematics and on the parts list in this Service Manual.

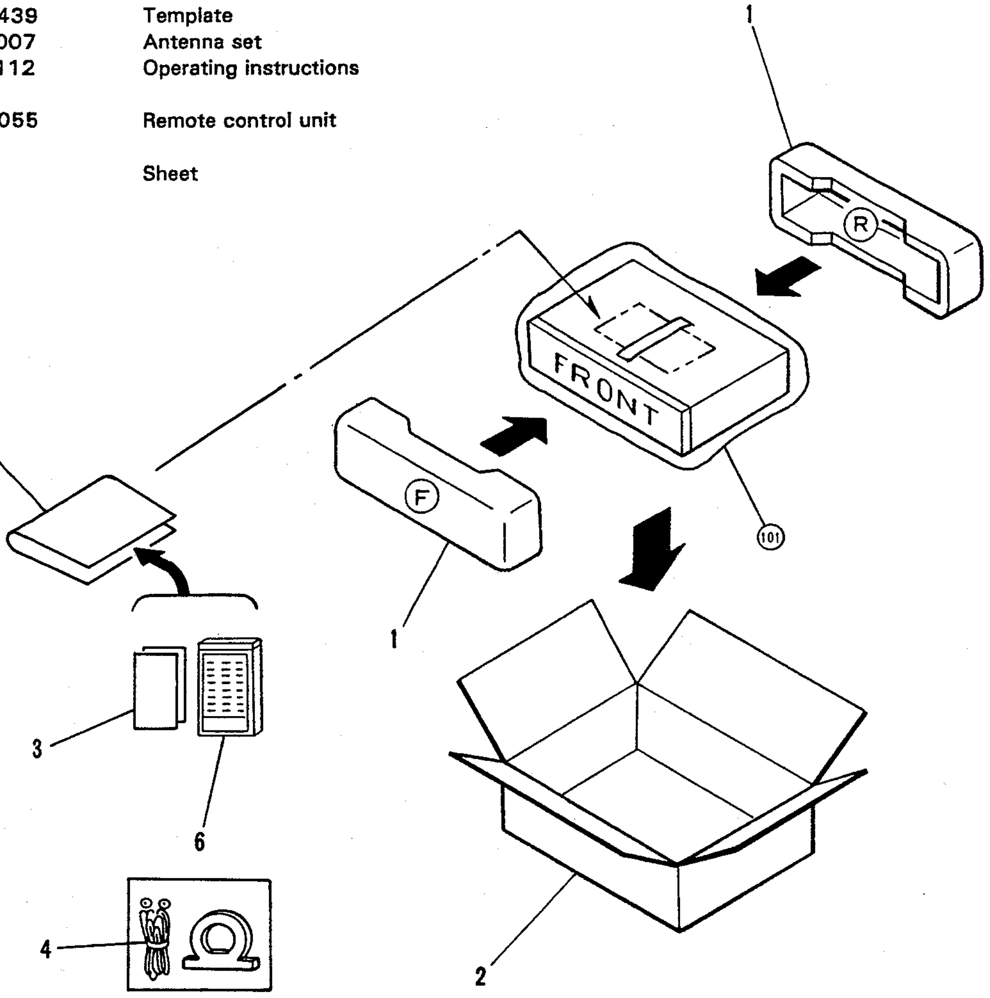
The use of a substitute replacement component which dose not have the same safety characteristics as the PIONEER recommended replacement one, shown in the parts list in this Service Manual, may create shock, fire, or other hazards.

Product Safety is continuously under review and new instructions are issued from time to time. For the latest information, always consult the current PIONEER Service Manual. A subscription to, or additional copies of, PIONEER Service Manual may be obtained at a nominal charge from PIONEER.

2. PACKING

Parts List of Packing

Mark	No.	Parts No.	Description
	1	AHA1164	Front rear pad
	2	AHD1437	Packing case
	3	AAK1439	Template
	4	AEA1007	Antenna set
	5	ARB1112	Operating instructions
	6	AXD1055	Remote control unit
	101		Sheet

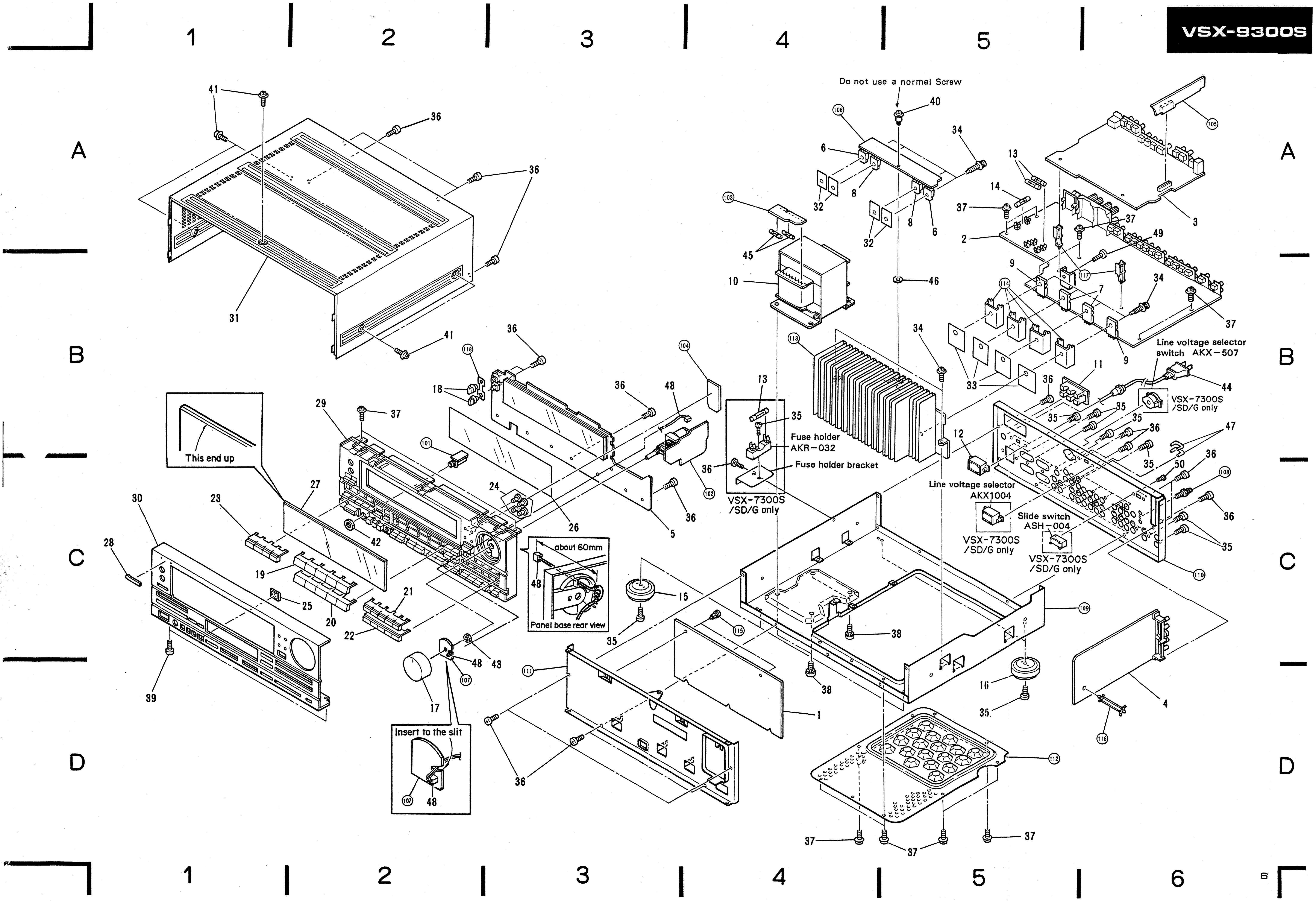


3. EXPLODED VIEWS AND PARTS LIST

NOTES:

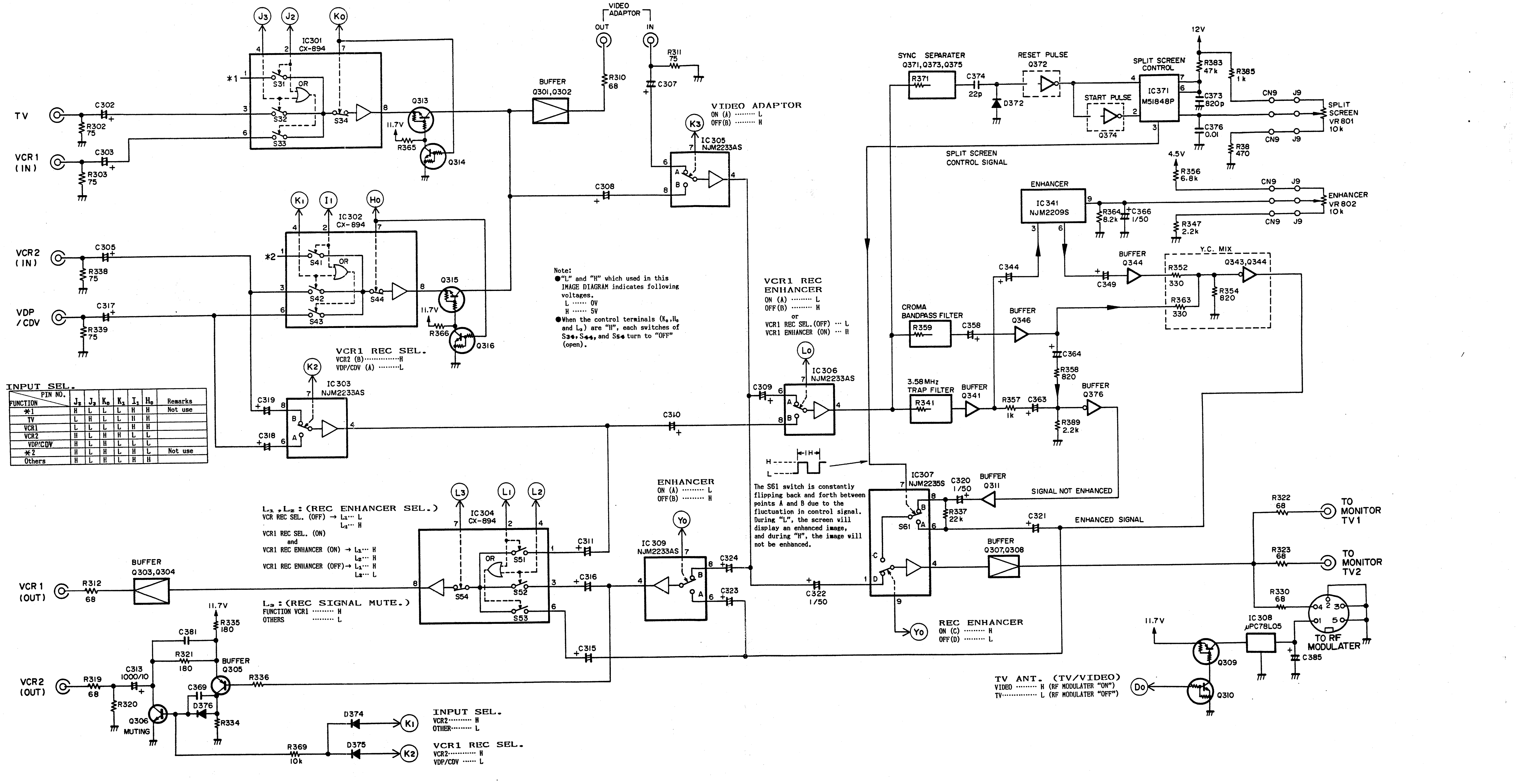
- *Parts without part number cannot be supplied.*
- *The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.*
- *For your parts Stock Control, the fast moving items are indicated with the marks ★★ and★.*
  ★★ GENERALLY MOVES FASTER THAN★
  This classification shall be adjusted by each distributor because it depends on model number, temperature, humidity, etc.
- *Parts marked by "◉" are not always kept in stock. Their delivery time may be longer than usual or they may be unavailable.*

Mark	No.	Parts No.	Description
	1	AWX1016	Pro logic assembly
	2	AWZ1961	AF assembly
	3	AWZ1965	VIDEO/SUR/CONTROL assembly
	4	AWZ1966	Tuner assembly
	5	AWZ1967	Front control A assembly
⚠★★	6	2SA1263N	Transistor (Q7,Q8)
⚠★★	7	2SA1302	Transistor (Q3,Q4)
⚠★★	8	2SC3180N	Transistor (Q5,Q6)
⚠★★	9	2SC3281	Transistor (Q1,Q2)
⚠ ★	10	ATS1144	Power transformer (AC120V,T1)
⚠	11	AKP-515 (AKP-504)	AC socket (3P OUTLET)
⚠★★	12	AKX1004	Speaker impedance selector
⚠★★	13	AEK-109	Fuse (6A/125V,FU3,FU4)
⚠★★	14	AEK-310	Fuse (10A/125V,FU1)
	15	AMR1434	Insulator assembly
	16	AMR1435	Insulator assembly
	17	AAB1056	Rotary knob (VOLUME)
	18	AAB1078	Rotary knob S (SPLIT SCREEN,ENHANCER)
	19	AAD1390	Function knob (VCR1,VCR2,VDP/CDV,TV, VIDEO ADAPTOR)
	20	AAD1391	Function knob (TAPE1/DAT1,TAPE2/DAT2 MONITOR,TUNER,PHONO)
	21	AAD1394	Hinge knob (*1 −*5)
	22	AAD1395	Hinge knob (*6 −*0)
	23	AAD1396	Hinge knob (OFF, STADIUM, SIMULATED SURROUND, DOLBY SURROUND, PRO LOGIC)
	24	AAD1398	Tact knob (REAR LEVEL, BALANCE)
	25	AAK1323	Filter
	26	AAK1513	PVC filter
	27	AAK1519	Acrylic panel
	28	AAM-030	Badge
	29	AAM1349	Panel base
	30	ANB1205	Front panel
	31	AZN1804	Bonnet case
	32	AEC-818 (AEC1140)	Mica sheet
	33	AEC1123	Mica sheet
	34	ABA-297	Screw
	35	ABA-298	Screw
	36	ABA1009	Screw
	37	ABA1011	Screw
	38	ABA1034	Screw
	39	ABA1048	Screw
	40	ABA1063	Screw
	41	FBT40P080FZK	Screw
	42	ABN-065	Nut
	43	NK90FUC	Nut
	44	ADG1031 (ADG1001)	AC power cord
⚠★★	45	AEK-120	Fuse (1.25A/125V, FU5, FU6)
	46	ABE-061	Washer
	47	AKM1019	Jumper Plug
	48	ADX1191	2P lead wire
	49	ABA1012	Screw
	50	VMZ26P040FZK	Screw
	101		Headphone assembly
	102		Motor-volume assembly
	103		Terminal assembly
	104		Front control B assembly
	105		Meter amp assembly
	106		Rear amp assembly
	107		Vol IND assembly
	108		Terminal (GND)
	109		Chassis
	110		Rear panel
	111		Panel stay
	112		Bottom plate
	113		Heat sink
	114		Sub heat sink
	115		Pin grommet
	116		P.C.B. suport
	117		P.C.B. holder
	118		Blind sheet


A
B
C
D
Do not use a normal Screw
This end up
Fuse holder
AKR–032
Fuse holder bracket
VSX–7300S
/SD/G only
Line voltage selector
switch AKX–507
VSX–7300S
/SD/G only
Line voltage selector
AKX1004
VSX–7300S
/SD/G only
Slide switch
ASH–004
VSX–7300S
/SD/G only
about 60mm
Panel base rear view
Insert to the slit

4. IMAGE DIAGRAM

4.1 VIDEO SECTION


J3
J2
Ko
IC301
CX-894
*1
S31
OR
S32
S33
S34
TV
C302
R302
75
VCR1
(IN)
C303
R303
75
Q313
11.7V
R365
Q314
BUFFER
Q301,Q302
VIDEO ADAPTOR
OUT
IN
R310
68
R311
75
C307
VIDEO ADAPTOR
ON (A) ········ L
OFF(B) ········ H
K3
IC305
NJM2233AS
C308
K1
I1
Ho
IC302
CX-894
*2
S41
S42
S43
S44
VCR2
(IN)
C305
R338
75
VDP
/CDV
C317
R339
75
Q315
11.7V
R366
Q316
VCR1 REC SEL.
VCR2 (B)··············H
VDP/CDV (A) ········L
K2
IC303
NJM2233AS
C319
C318
C310
L3
L1
L2
IC304
CX-894
S51
S52
S53
S54
C311
C316
C315
ENHANCER
ON (A) ········ L
OFF(B) ········ H
Yo
IC309
NJM2233AS
C324
C323
C322
1/50
VCR1
(OUT)
R312
68
BUFFER
Q303,Q304
VCR2
(OUT)
R319
68
C313
1000/10
R320
Q306
MUTING
C381
R321
180
11.7V
R335
180
BUFFER
Q305
C369
D376
R334
R336
R369
10k
D374
D375
K1
K2
INPUT SEL.
VCR2·········· H
OTHER········ L
VCR1 REC SEL.
VCR2·············· H
VDP/CDV ······ L
Lo
IC306
NJM2233AS
C309
H
L
1H
SYNC SEPARATER
Q371,Q373,Q375
R371
C374
22p
D372
RESET PULSE
Q372
START PULSE
Q374
SPLIT SCREEN CONTROL
IC371
M51848P
12V
R383
47k
R385
1k
C373
820p
C376
0.01
R38
470
CN9
J9
SPLIT SCREEN
VR801
10k
SPLIT SCREEN CONTROL SIGNAL
4.5V
R356
6.8k
ENHANCER
IC341
NJM2209S
R364
8.2k
C366
1/50
R347
2.2k
ENHANCER
VR802
10k
C344
C349
BUFFER
Q344
Y.C. MIX
Q343,Q344
R352
330
R354
820
R363
330
CROMA
BANDPASS FILTER
R359
C358
BUFFER
Q346
C364
R358
820
3.58MHz
TRAP FILTER
R341
BUFFER
Q341
R357
1k
C363
BUFFER
Q376
R389
2.2k
IC307
NJM2235S
C320
1/50
BUFFER
Q311
R337
22k
S61
SIGNAL NOT ENHANCED
C321
ENHANCED SIGNAL
BUFFER
Q307,Q308
R322
68
TO MONITOR TV1
R323
68
TO MONITOR TV2
R330
68
IC308
μPC78L05
11.7V
Q309
Q310
C385
TO RF MODULATER
Do

Note:

- "L" and "H" which used in this IMAGE DIAGRAM indicates following voltages.
  L ······ 0V
  H ······ 5V
- When the control terminals (K_0, H_0 and L_3) are "H", each switches of S_{34}, S_{44}, and S_{54} turn to "OFF" (open).

VIDEO ADAPTOR
ON (A) ········ L
OFF(B) ········ H

VCR1 REC SEL.
VCR2 (B)··············H
VDP/CDV (A) ········L

VCR1 REC ENHANCER
ON (A) ········ L
OFF(B) ········ H
or
VCR1 REC SEL.(OFF) ··· L
VCR1 ENHANCER (ON) ··· H

The S61 switch is constantly flipping back and forth between points A and B due to the fluctuation in control signal. During "L", the screen will display an enhanced image, and during "H", the image will not be enhanced.

ENHANCER
ON (A) ········ L
OFF(B) ········ H

L_1, L_2 : (REC ENHANCER SEL.)
VCR REC SEL. (OFF) → L_1··· L
L_2··· H
VCR1 REC SEL. (ON)
and
VCR1 REC ENHANCER (ON) → L_1··· H
L_2··· H
VCR1 REC ENHANCER (OFF)→ L_1··· H
L_2··· L

L_3 : (REC SIGNAL MUTE.)
FUNCTION VCR1 ········ H
OTHERS ········ L

INPUT SEL.
VCR2········ H
OTHER········ L

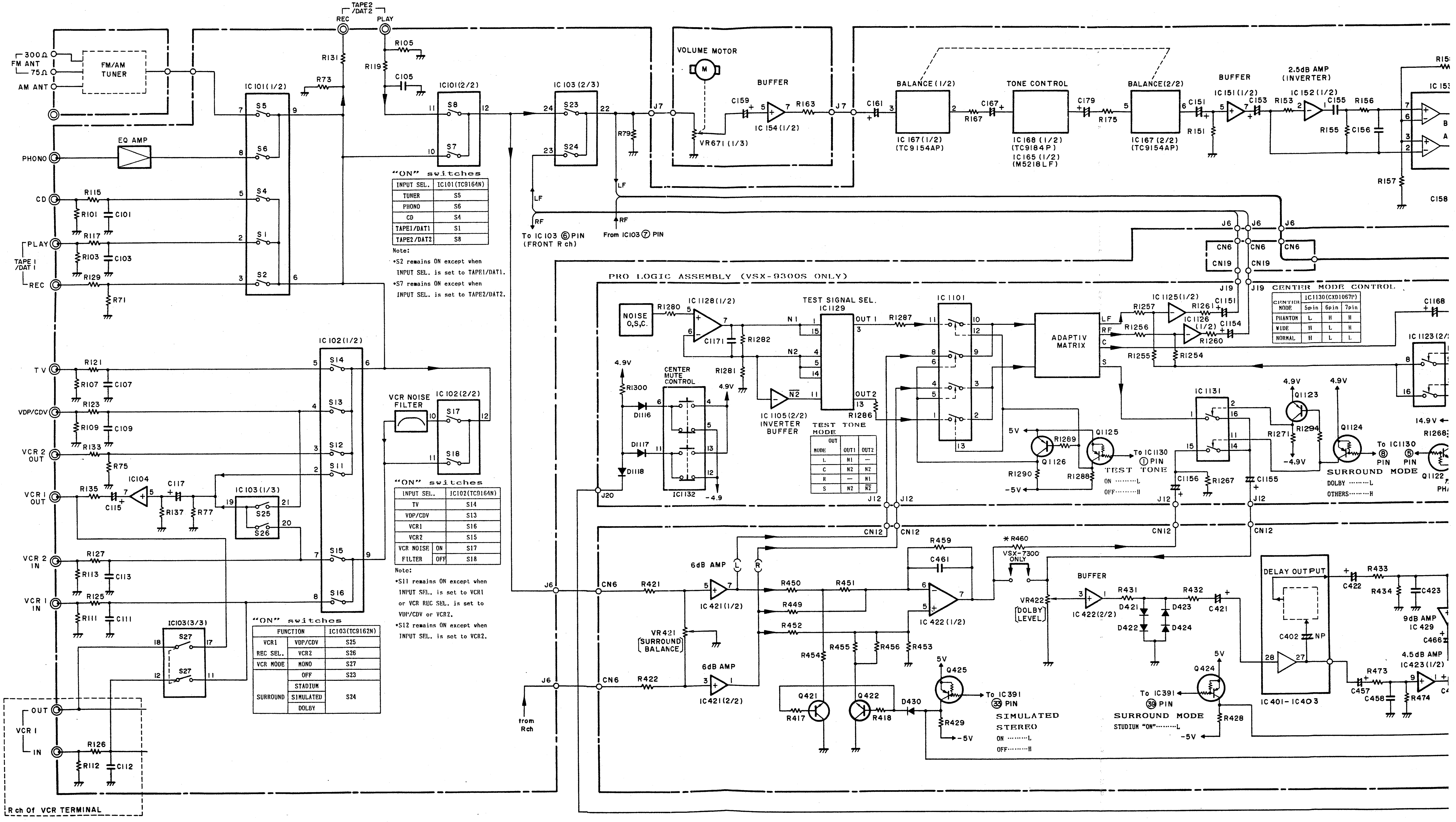
VCR1 REC SEL.
VCR2············ H
VDP/CDV ······ L

REC ENHANCER
ON (C) ········ H
OFF(D) ········ L

TV ANT. (TV/VIDEO)
VIDEO ········ H (RF MODULATER "ON")
TV············· L (RF MODULATER "OFF")

INPUT SEL.

PIN NO. / FUNCTION	J_2	J_3	K_0	K_1	I_1	H_0	Remarks
*1	H	L	L	L	H	H	Not use
TV	L	H	L	L	H	H	
VCR1	L	L	L	L	H	H	
VCR2	H	L	H	H	L	L	
VDP/CDV	H	L	H	L	L	L	
*2	H	L	H	L	H	L	Not use
Others	H	L	H	L	H	H	


FM ANT
300Ω
75Ω
AM ANT
FM/AM TUNER
PHONO
EQ AMP
CD
PLAY
TAPE 1 /DAT 1
REC
TAPE2 /DAT2
REC
PLAY
R131
R73
R119
R105
C105
IC101(1/2)
IC101(2/2)
S5
S6
S4
S1
S2
S8
S7
R115
R101
C101
R117
R103
C103
R129
R71
IC103(2/3)
S23
S24
R79
LF
RF
To IC103 ⑥PIN (FRONT R ch)
From IC103 ⑦ PIN
J7
VOLUME MOTOR
M
VR671(1/3)
BUFFER
C159
R163
IC154(1/2)
C161
BALANCE(1/2)
IC167(1/2) (TC9154AP)
R167
C167
TONE CONTROL
IC168(1/2) (TC9184P)
IC165(1/2) (M5218LF)
C179
R175
BALANCE(2/2)
IC167(2/2) (TC9154AP)
C151
R151
BUFFER
IC151(1/2)
C153
R153
2.5dB AMP (INVERTER)
IC152(1/2)
C155
R156
R155
C156
R157
C158
IC15
J6
CN6
CN19
J19
TV
R121
R107
C107
VDP/CDV
R123
R109
C109
VCR 2 OUT
R133
R75
VCR 1 OUT
R135
C115
IC104
C117
R137
R77
IC103(1/3)
S25
S26
VCR 2 IN
R127
R113
C113
VCR 1 IN
R125
R111
C111
IC103(3/3)
S27
IC102(1/2)
S14
S13
S12
S11
S15
S16
VCR NOISE FILTER
IC102(2/2)
S17
S18
OUT
VCR 1
IN
R126
R112
C112
R ch Of VCR TERMINAL
from Rch
PRO LOGIC ASSEMBLY (VSX-9300S ONLY)
NOISE O.S.C.
R1280
IC1128(1/2)
C1171
R1282
R1281
4.9V
R1300
D1116
D1117
D1118
CENTER MUTE CONTROL
IC1132
-4.9
J20
TEST SIGNAL SEL.
IC1129
N1
N2
OUT 1
OUT2
R1286
R1287
IC1105(2/2) INVERTER BUFFER
IC1101
ADAPTIV MATRIX
LF
RF
C
S
R1257
R1256
R1255
R1254
IC1125(1/2)
IC1126 (1/2)
R1261
C1151
C1154
R1260
5V
R1289
Q1125
Q1126
R1290
R1288
-5V
To IC1130 ①PIN
TEST TONE
ON ……L
OFF……H
IC1131
C1156
R1267
C1155
R1271
R1294
Q1123
4.9V
-4.9V
Q1124
To IC1130 ⑧ PIN
⑤ PIN
SURROUND MODE
DOLBY ……L
OTHERS……H
IC1123(2/
C1168
14.9V
R1268
Q1122
J12
CN12
6dB AMP
L
R
R421
IC421(1/2)
R422
IC421(2/2)
VR421 (SURROUND BALANCE)
R450
R451
R449
R452
R459
C461
IC422(1/2)
* R460
VSX-7300 ONLY
VR422 (DOLBY LEVEL)
R454
R455
R456
R453
Q421
Q422
R417
R418
D430
5V
Q425
R429
-5V
To IC391 ㉝ PIN
SIMULATED STEREO
ON ……L
OFF……H
BUFFER
IC422(2/2)
R431
D421
D422
R432
D423
D424
C421
Q424
R428
To IC391 ㊴ PIN
SURROUND MODE
STUDIUM "ON"……L
DELAY OUTPUT
C402
NP
IC401 - IC403
C422
R433
R434
C423
9dB AMP IC429
C466
4.5dB AMP IC423(1/2)
R473
C457
C458
R474

"ON" switches

INPUT SEL.	IC101(TC9164N)
TUNER	S5
PHONO	S6
CD	S4
TAPE1/DAT1	S1
TAPE2/DAT2	S8

Note:

- •S2 remains ON except when INPUT SEL. is set to TAPE1/DAT1.
- •S7 remains ON except when INPUT SEL. is set to TAPE2/DAT2.

"ON" switches

INPUT SEL.		IC102(TC9164N)
TV		S14
VDP/CDV		S13
VCR1		S16
VCR2		S15
VCR NOISE FILTER	ON	S17
	OFF	S18

Note:

- •S11 remains ON except when INPUT SEL. is set to VCR1 or VCR REC SEL. is set to VDP/CDV or VCR2.
- •S12 remains ON except when INPUT SEL. is set to VCR2.

"ON" switches

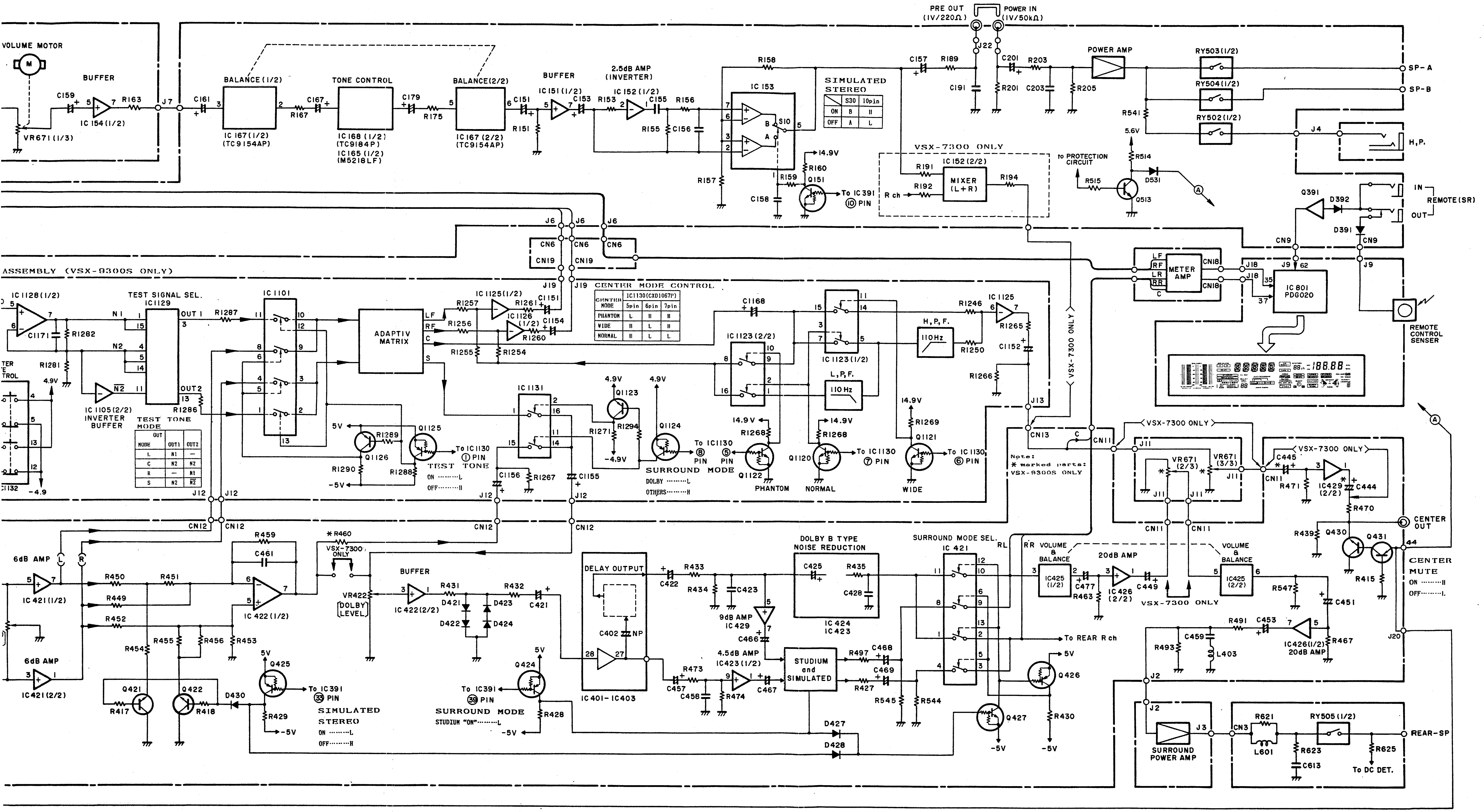
FUNCTION		IC103(TC9162N)
VCR1 REC SEL.	VDP/CDV	S25
	VCR2	S26
VCR MODE	MONO	S27
SURROUND	OFF	S23
	STADIUM	S24
	SIMULATED	
	DOLBY	

TEST TONE MODE

MODE \ OUT	OUT1	OUT2
L	N1	—
C	N2	N2
R	—	N1
S	N2	$\overline{N2}$

CENTER MODE CONTROL

CENTER MODE	IC1130(CXD1067P)		
	5pin	6pin	7pin
PHANTOM	L	H	H
WIDE	H	L	H
NORMAL	H	L	L


VOLUME MOTOR
BUFFER
IC 154 (1/2)
VR671 (1/3)
BALANCE (1/2)
IC 167 (1/2)
(TC9154AP)
TONE CONTROL
IC 168 (1/2)
(TC9184P)
IC 165 (1/2)
(M5218LF)
BALANCE (2/2)
IC 167 (2/2)
(TC9154AP)
BUFFER
IC 151 (1/2)
2.5dB AMP
(INVERTER)
IC 152 (1/2)
IC 153
S10
To IC391
⑩ PIN
PRE OUT
(1V/220Ω)
POWER IN
(1V/50kΩ)
J22
POWER AMP
RY503 (1/2)
RY504 (1/2)
RY502 (1/2)
SP-A
SP-B
J4
H.P.
VSX-7300 ONLY
IC 152 (2/2)
MIXER
(L+R)
R ch
to PROTECTION CIRCUIT
Q513
D531
5.6V
Q391
D392
D391
IN
REMOTE (SR)
OUT
CN9
J9
J18
CN18
METER AMP
LF
RF
LR
RR
IC 801
PD6020
REMOTE CONTROL SENSER
J6
CN6
CN19
J19
ASSEMBLY (VSX-9300S ONLY)
IC 1128 (1/2)
TEST SIGNAL SEL.
IC 1129
OUT 1
OUT2
N1
N2
IC 1105 (2/2)
INVERTER
BUFFER
IC 1101
ADAPTIV MATRIX
IC 1125 (1/2)
IC 1126 (1/2)
IC 1131
Q1123
Q1124
Q1125
Q1126
To IC1130
① PIN
TEST TONE
ON ·········L
OFF·········H
To IC1130
⑧ PIN
⑤ PIN
SURROUND MODE
DOLBY ··········L
OTHERS··········H
IC 1123 (2/2)
IC 1123 (1/2)
H.P.F.
110Hz
L.P.F.
110Hz
IC 1125
14.9V
4.9V
-4.9V
-5V
Q1122
PHANTOM
Q1120
NORMAL
Q1121
WIDE
To IC1130
⑦ PIN
To IC1130
⑥ PIN
J13
CN13
CN11
J11
Note:
* marked parts:
VSX-9300S ONLY
VR671 (2/3)
VR671 (3/3)
IC429 (2/2)
Q430
Q431
CENTER OUT
CENTER MUTE
ON ·········H
OFF·········L
J12
CN12
6dB AMP
IC 421 (1/2)
IC 421 (2/2)
IC 422 (1/2)
* R460
VSX-7300 ONLY
VR422
(DOLBY LEVEL)
BUFFER
IC 422 (2/2)
Q421
Q422
Q425
Q424
To IC391
㉝ PIN
SIMULATED STEREO
ON ··········L
OFF··········H
To IC391
㊴ PIN
SURROUND MODE
STUDIUM "ON"··········L
DELAY OUTPUT
IC401 - IC403
9dB AMP
IC 429
4.5dB AMP
IC423 (1/2)
DOLBY B TYPE NOISE REDUCTION
IC 424
IC 423
STUDIUM and SIMULATED
SURROUND MODE SEL.
IC 421
RL
RR
VOLUME & BALANCE
IC425 (1/2)
20dB AMP
IC 426 (2/2)
IC425 (2/2)
IC426 (1/2)
20dB AMP
To REAR R ch
Q426
Q427
J2
J20
SURROUND POWER AMP
J3
CN3
RY505 (1/2)
REAR-SP
To DC DET.

SIMULATED STEREO

	S30	10pin
ON	B	H
OFF	A	L

CENTER MODE CONTROL

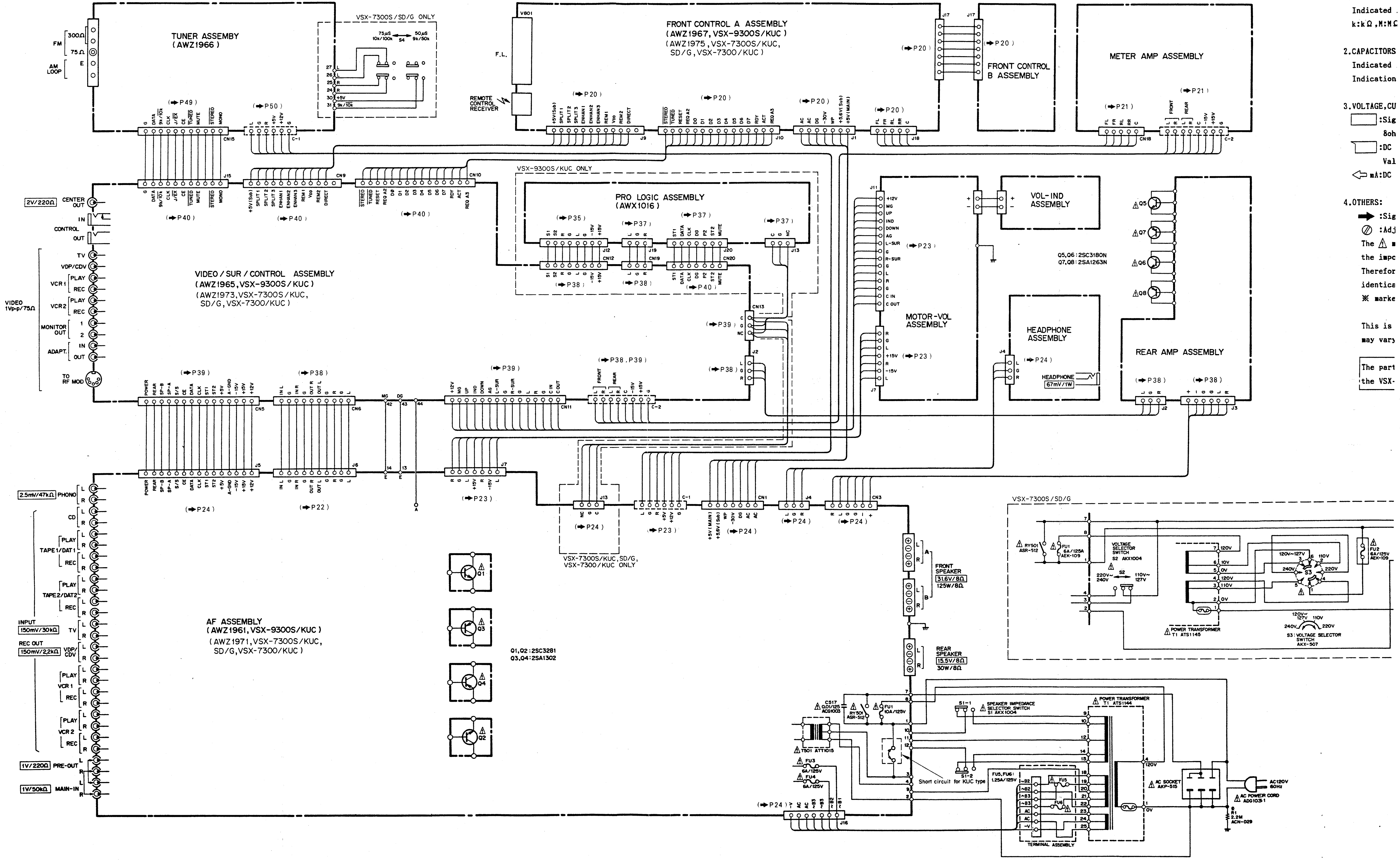
CENTER MODE	IC1130(CXD1067P)		
	5pin	6pin	7pin
PHANTOM	L	H	H
WIDE	H	L	H
NORMAL	H	L	L

TEST TONE MODE

MODE \ OUT	OUT1	OUT2
L	N1	—
C	N2	N2
R	—	N1
S	N2	$\overline{N2}$

5. SCHEMATIC DIAGRAM AND P.C.BOARD PATTERNS

5.1 OVER ALL SCHEMATIC DIAGRAM


A
B
C
D
TUNER ASSEMBY
(AWZ1966)
FM 300Ω 75Ω
AM LOOP
E
VSX-7300S/SD/G ONLY
75μS 10k/100k S4 50μS 9k/50k
CN15
J15
CN9
CN10
C-1
(➡P49)
(➡P50)
(➡P40)
FRONT CONTROL A ASSEMBLY
(AWZ1967, VSX-9300S/KUC)
(AWZ1975, VSX-7300S/KUC, SD/G, VSX-7300/KUC)
V801
F.L.
REMOTE CONTROL RECEIVER
(➡P20)
J9
J10
J1
J18
J17
FRONT CONTROL B ASSEMBLY
METER AMP ASSEMBLY
(➡P21)
CN18
C-2
VSX-9300S/KUC ONLY
PRO LOGIC ASSEMBLY
(AWX1016)
(➡P35)
(➡P37)
(➡P38)
(➡P40)
J12 CN12 J19 CN19 J20 CN20 J13 CN13
2V/220Ω CENTER OUT
CONTROL IN OUT
VIDEO 1Vp-p/75Ω
TV
VDP/CDV
VCR1 PLAY REC
VCR2 PLAY REC
MONITOR OUT 1 2
ADAPT. IN OUT
TO RF MOD
VIDEO / SUR / CONTROL ASSEMBLY
(AWZ1965, VSX-9300S/KUC)
(AWZ1973, VSX-7300S/KUC, SD/G, VSX-7300/KUC)
(➡P39)
(➡P38)
(➡P38, P39)
CN5 CN6 CN11 C-2
J5 J6 J7
J2
J11
MOTOR-VOL ASSEMBLY
(➡P23)
VOL-IND ASSEMBLY
Q5,Q6:2SC3180N
Q7,Q8:2SA1263N
HEADPHONE ASSEMBLY
HEADPHONE 67mV/1W
(➡P24)
J4
REAR AMP ASSEMBLY
J3
2.5mV/47kΩ PHONO
CD
TAPE1/DAT1 PLAY REC
TAPE2/DAT2 PLAY REC
INPUT 150mV/30kΩ TV
REC OUT 150mV/22kΩ VDP/CDV
VCR1 PLAY REC
VCR2 PLAY REC
1V/220Ω PRE-OUT
1V/50kΩ MAIN-IN
AF ASSEMBLY
(AWZ1961, VSX-9300S/KUC)
(AWZ1971, VSX-7300S/KUC, SD/G, VSX-7300/KUC)
(➡P24)
(➡P22)
(➡P23)
Q1 Q3 Q4 Q2
Q1,Q2:2SC3281
Q3,Q4:2SA1302
VSX-7300S/KUC, SD/G, VSX-7300/KUC ONLY
C-1 CN1 J4 CN3
FRONT SPEAKER 31.6V/8Ω 125W/8Ω
REAR SPEAKER 15.5V/8Ω 30W/8Ω
VSX-7300S/SD/G
RY501 ASR-512
FU1 6A/125A AEK-109
VOLTAGE SELECTOR SWITCH S2 AKX1004
220V~ 240V S2 110V~ 127V
POWER TRANSFORMER T1 ATS1145
S3: VOLTAGE SELECTOR SWITCH AKX-507
FU2 6A/125V AEK-109
C517 0.01/125 ACG1002
RY501 ASR-512
FU1 10A/125V
T501 ATT1015
FU3 6A/125V
FU4 6A/125V
S1-1 SPEAKER IMPEDANCE SELECTOR SWITCH S1 AKX1004
S1-2
Short circuit for KUC type
POWER TRANSFORMER T1 ATS1144
FU5, FU6: 1.25A/125V
TERMINAL ASSEMBLY
AC SOCKET AKP-515
AC POWER CORD ADG1031
AC120V 60Hz
R1 2.2M ACN-029
J16
(➡P24)

NOTE OF SCI

1.RESISTORS:
Indicated
k:kΩ,M:MΩ

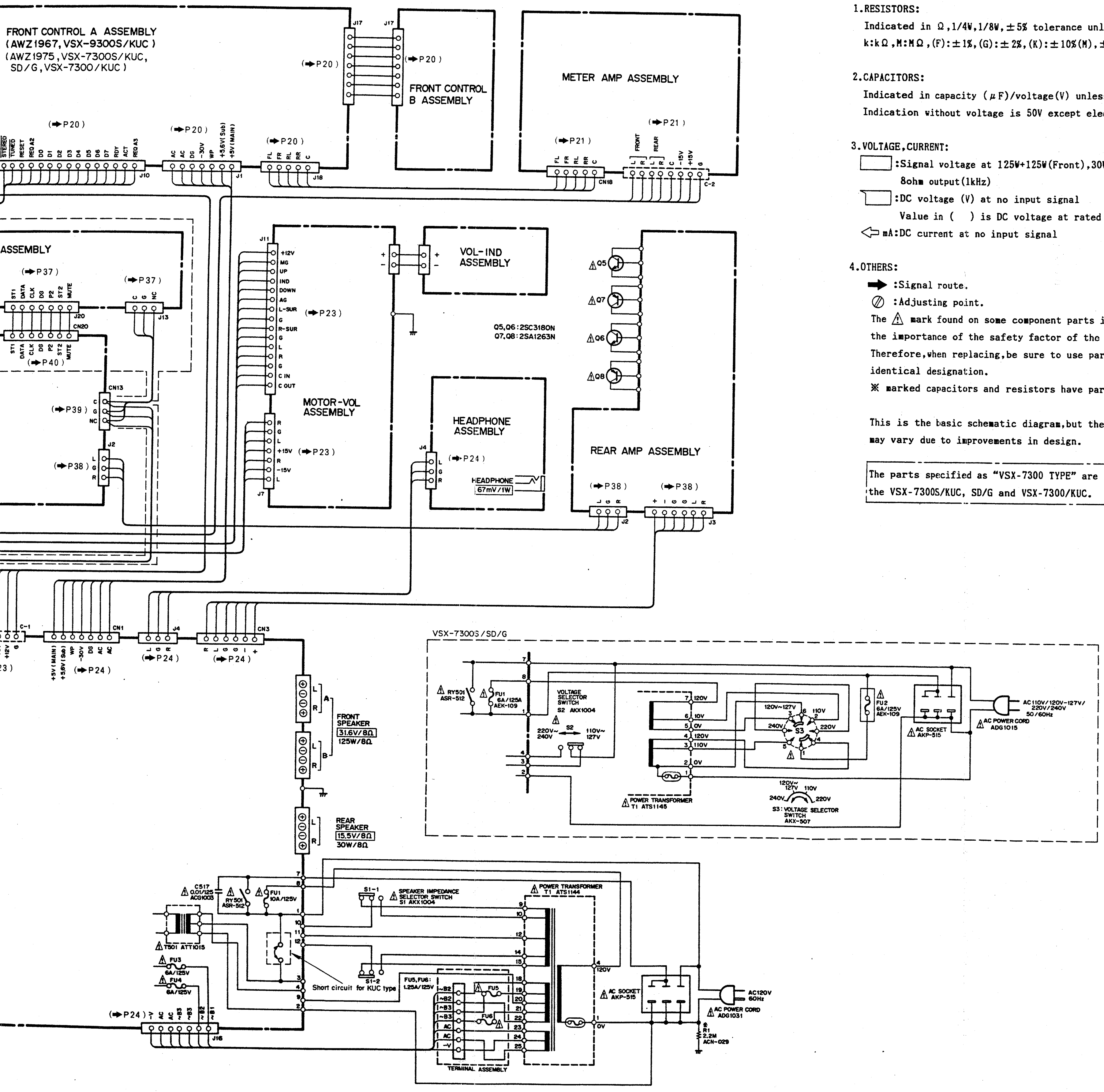
2.CAPACITORS
Indicated
Indication

3.VOLTAGE,CU
:Sig
8oh
:DC
Val
⇦ mA:DC

4.OTHERS:
➡ :Sig
⊘ :Adj
The ⚠ ■
the impc
Therefor
identica
※ marke

This is
may vary

The part
the VSX-


FRONT CONTROL A ASSEMBLY
(AWZ1967, VSX-9300S/KUC)
(AWZ1975, VSX-7300S/KUC, SD/G, VSX-7300/KUC)
FRONT CONTROL B ASSEMBLY
METER AMP ASSEMBLY
ASSEMBLY
VOL-IND ASSEMBLY
MOTOR-VOL ASSEMBLY
HEADPHONE ASSEMBLY
HEADPHONE 67mV/1W
REAR AMP ASSEMBLY
Q5,Q6:2SC3180N
Q7,Q8:2SA1263N
FRONT SPEAKER 31.6V/8Ω 125W/8Ω
REAR SPEAKER 15.5V/8Ω 30W/8Ω
VSX-7300S/SD/G
RY501 ASR-512
FU1 6A/125A AEK-109
VOLTAGE SELECTOR SWITCH S2 AKX1004
220V~240V S2 110V~127V
POWER TRANSFORMER T1 ATS1145
S3: VOLTAGE SELECTOR SWITCH AKX-507
FU2 6A/125V AEK-109
AC SOCKET AKP-515
AC POWER CORD ADG1015
AC110V/120V-127V/220V/240V 50/60Hz
C517 0.01/125 ACG1003
RY501 ASR-512
FU1 10A/125V
SPEAKER IMPEDANCE SELECTOR SWITCH S1 AKX1004
POWER TRANSFORMER T1 ATS1144
T501 ATT1015
FU3 6A/125V
FU4 6A/125V
FU5,FU6: 1.25A/125V
Short circuit for KUC type
TERMINAL ASSEMBLY
AC SOCKET AKP-515
AC POWER CORD ADG1031
AC120V 60Hz
R1 2.2M ACN-029
4
5
6
7
8
9
A
B
C
D

NOTE OF SCHEMATIC DIAGRAM

1.RESISTORS:

Indicated in Ω,1/4W,1/8W,±5% tolerance unless otherwise noted k:kΩ,M:MΩ,(F):±1%,(G):±2%,(K):±10%(M),±20% tolerance

2.CAPACITORS:

Indicated in capacity (μF)/voltage(V) unless otherwise noted p:pF Indication without voltage is 50V except electrolytic capacitor.

3.VOLTAGE,CURRENT:

▭ :Signal voltage at 125W+125W(Front),30W+30W(Rear), 8ohm output(1kHz)

▭ :DC voltage (V) at no input signal
Value in ( ) is DC voltage at rated power.

⇦ mA:DC current at no input signal

4.OTHERS:

➡ :Signal route.

⊘ :Adjusting point.

The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore,when replacing,be sure to use parts of identical designation.

※ marked capacitors and resistors have parts numbers.

This is the basic schematic diagram,but the actual circuit may vary due to improvements in design.

The parts specified as "VSX-7300 TYPE" are required for the VSX-7300S/KUC, SD/G and VSX-7300/KUC.

5.SWITCH

S1:SPEAKER IMPEDANCE SELECTOR
8Ω or more⇔4Ω to less than 8Ω
S2:Voltage Selector (SD/G model only)
220~240V⇔110~127V
S3:Voltage Selector (SD/G model only)
110V,120~127V,220V,240V

S4:CHANNEL STEP/FM DE-EMPHASIS (SD/G model only)
75μS⇔50μS
10kHz/100kHz⇔9kHz/50kHz

S801:TUNING UP
S802:TUNING DOWN
S803:ST 1
S804:ST 2
S805:ST 3
S806:ST 4
S807:ST 5
S808:FM
S809:AM
S810:ST 6
S811:ST 7
S812:ST 8
S813:ST 9
S814:ST10
S815:TUNING MODE
S816:DIRECT ACCESS TUNING
S817:FM MODE
S818:MEMORY
S819:MEMORY SCAN
S820:STATION NAME

S822:HITS (Hyper Intelligent Tuning System)
S823:REAR UP
S824:REAR DOWN
S825:SIMULATED STEREO
S826:VIDEO SIGNAL SELECTOR
S827:VCR 1
S828:VCR 2
S829:VDP/CDV
S830:TV
S831:L
S832:R
S833:MUTE
S834:TAPE2/DAT2
S835:TAPE1/DAT1
S836:CD

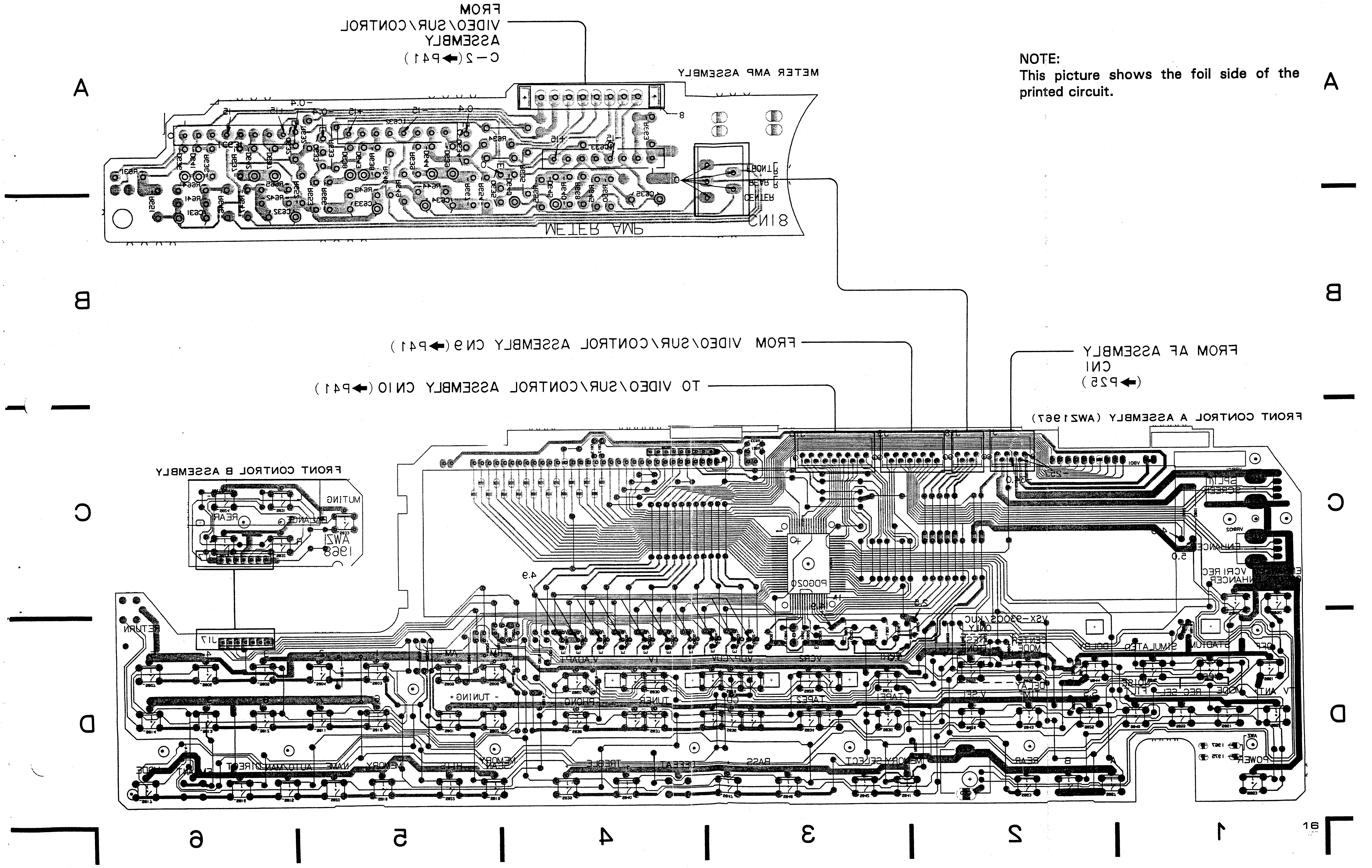
S837:TUNER
S838:PHONO
S839:TREBLE UP
S840:TREBLE DOWN
S841:ACOUSTIC MEMORY
S842:ACOUSTIC SELECT
S843:DELAY TIME
S844:DOLBY SURROUND
S845:STADIUM
S846:SIMULATED
S847:BASS UP
S848:BASS DOWN
S849:VCR NOISE FILTER
S850:ENHANCER
S851:SURROUND OFF
S852:TV ANT
S853:POWER STANDBY

S855:SURROUND TEST TONE (VSX-9300S ONLY)
S856:CENTER MODE (VSX-9300S ONLY)
S857:SP-A
S858:SP-B
S859:VCR 1 REC SELECTOR
S860:VIDEO ADAPTOR
S861:VCR 1 MODE
S862:VCR 1 REC ENHANCER
S863:SP-REAR

THE UNDERLINED INDICATES THE SWITCH POSITION

5.2 FRONT CONTROL A, FRONT CONTROL B AND METER AMP ASSEMBLY

NOTE:
This picture shows the foil side of the printed circuit.


6
5
4
3
2
1
A
B
C
D
FROM VIDEO/SUR/CONTROL ASSEMBLY C-2 (➡P41)
METER AMP ASSEMBLY
METER AMP
CN18
FRONT L
REAR R
CENTER
FROM VIDEO/SUR/CONTROL ASSEMBLY CN9 (➡P41)
TO VIDEO/SUR/CONTROL ASSEMBLY CN10 (➡P41)
FROM AF ASSEMBLY CN1 (➡P25)
FRONT CONTROL A ASSEMBLY (AWZ1967)
FRONT CONTROL B ASSEMBLY
AWZ1968
MUTING
REAR
BALANCE
PDG020
VSX-9300S/KUC ONLY
TUNING
PHONO
TUNER
CD
TAPE1
TAPE2
VCR2
VDP/LDP
TV
V ADAPT
TREBLE
BASS
DEFEAT
MEMORY SELECT
MEMORY
NAME
DIRECT
STADIUM
SIMULATED
DOLBY
CENTER MODE
DELAY
REC SEL
NOISE
MODE
SPLIT
SCREEN
ENHANCE
VCR1 REC
POWER
REAR
RETURN

5.2 FRONT CONTROL A, FRONT CONTROL B AND METER AMP ASSEMBLY

NOTE

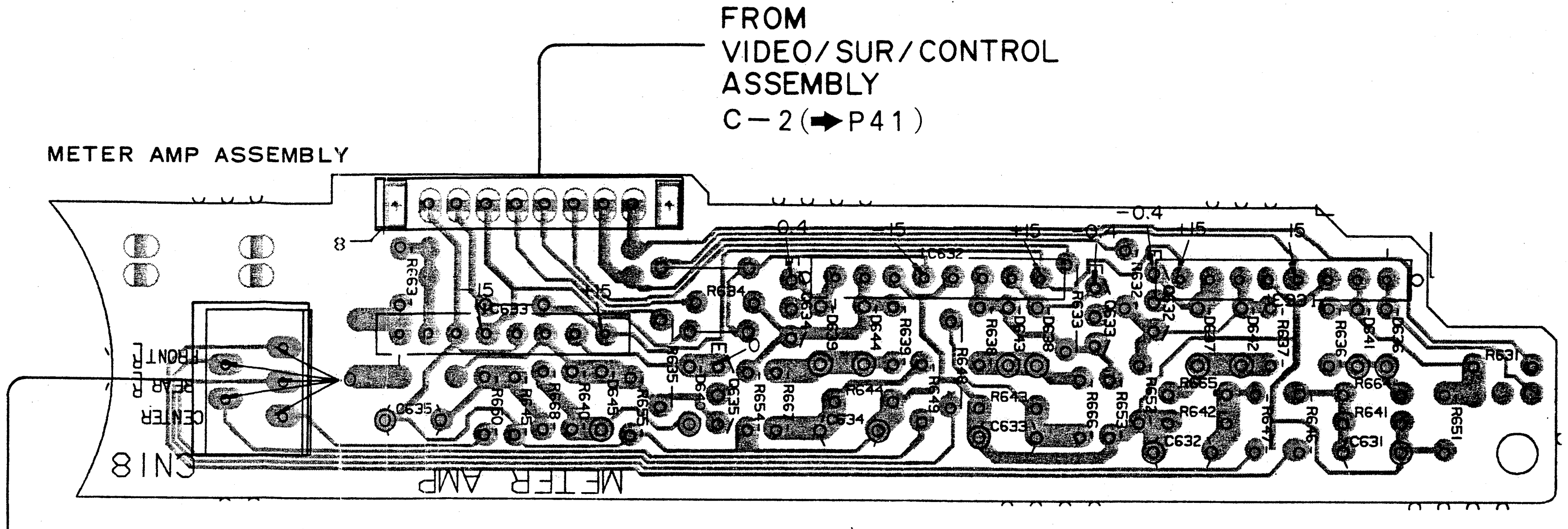
1. This P.C.B connection diagram is viewed from the parts mounted side.
2. The parts which have been mounted on the board can be replaced with those shown with the corresponding wiring symbols listed in the following Table.

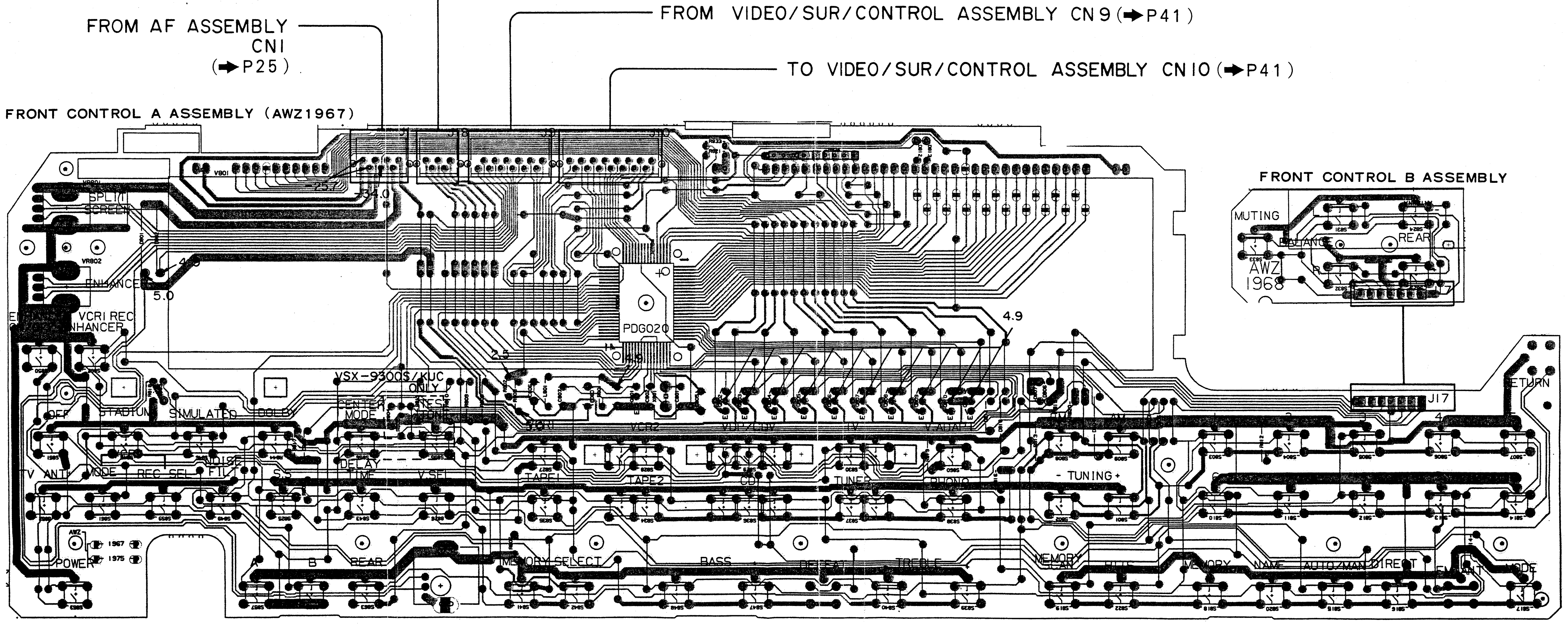
P.C.B. pattern diagram indication	Corresponding part symbol	Part Name
E Q504	E or E	Transistor
Q215	or	Radiator type transistor
D203	D203	Diode
R237	R237	Resistor
C513	+	Capacitor (Polarity)
C518		Capacitor (Non-polarity)

Others

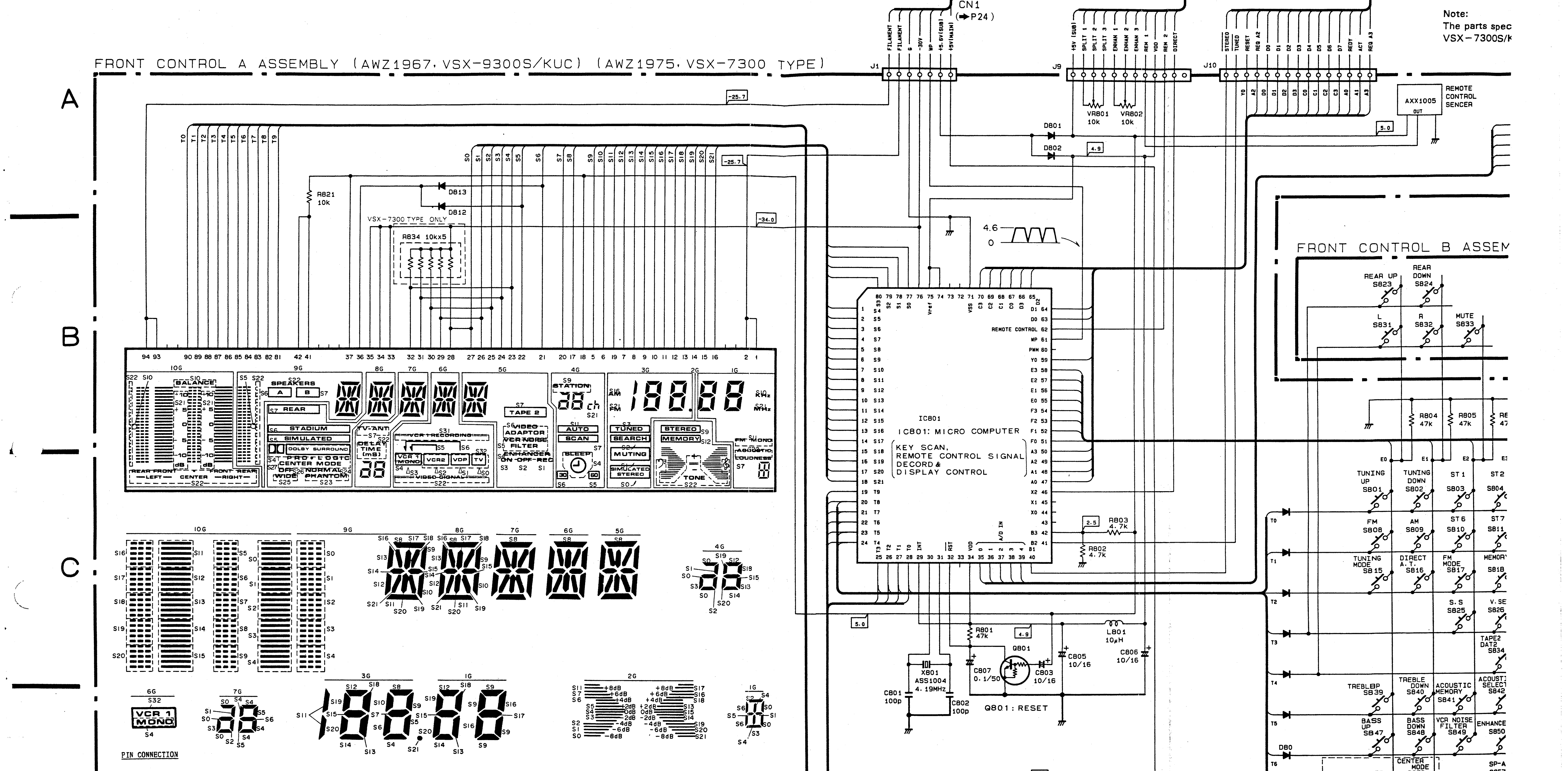
P.C.B. pattern diagram indication	Part Name
IC	IC
S	Switch
RY	Relay
L	Coil
F	Filter
VR	Variable resistor or Semi-fixed resistor

3. The capactor terminal marked with ◎ (double circles) shows negatine termianl.
4. The diode terminal marked with ◎ (double circles) shows cathode side.
5. The transistor terminal to which E is affixed shows the emitter.


FROM
VIDEO/SUR/CONTROL
ASSEMBLY
C−2(➡P41)
METER AMP ASSEMBLY
FRONT
REAR
CENTER
CN18
METER AMP
R634
R633
R632
R631
R636
R637
R638
R639
R640
R641
R642
R643
R644
R645
R646
R651
R653
R654
R655
R656
R657
R660
R661
R666
C631
C632
C633
C634
C635
D631
D632
D633
D634
D639
D641
D642
D644
D645
D646
D647
−0.4
15
8


FROM AF ASSEMBLY
CN1
(➡P25)
FROM VIDEO/SUR/CONTROL ASSEMBLY CN9(➡P41)
TO VIDEO/SUR/CONTROL ASSEMBLY CN10(➡P41)
FRONT CONTROL A ASSEMBLY (AWZ1967)
FRONT CONTROL B ASSEMBLY
MUTING
BALANCE
REAR
AWZ
1968
J17
VR801
VR802
SPLIT
SCREEN
ENHANCE
VCR1 REC
ENHANCER
PDG020
VSX-9300S/KUC
ONLY
STADIUM
SIMULATED
DOLBY
CENTER
MODE
TEST
TONE
OFF
TV ANT
MODE
REC SEL
NOISE
FIL
DELAY
TIME
V.SEL
TAPE1
TAPE2
VCR2
VDP/LDV
CD
TV
TUNER
PHONO
V.AUX
TUNING
RETURN
AWZ
1967
1975
POWER
A
B
REAR
MEMORY SELECT
BASS
DEFEAT
TREBLE
MEMORY
SCAN
MEMORY
NAME
AUTO/MAN
DIRECT
MODE
−25.7
5.0
4.9
2.5
4.8

FRONT CONTROL A, FRONT CONTROL B AND METER AMP ASSEMBLY


from AF ASSEMBLY CN1 (➡P24)
to VIDEO/SUR/CONTROL CN9 (➡P40)
to VIDEO/SUR/CONTROL CN10 (➡P40
Note:
The parts spec
VSX-7300S/K
FRONT CONTROL A ASSEMBLY (AWZ1967, VSX-9300S/KUC) (AWZ1975, VSX-7300 TYPE)
J1
FILAMENT
FILAMENT
G
-30V
MP
+5.6V(SUB)
+5V(MAIN)
J9
15V (SUB)
SPLIT 1
SPLIT 2
SPLIT 3
ENHAN 1
ENHAN 2
ENHAN 3
REM 1
VDD
REM 2
DIRECT
J10
STEREO
TUNED
RESET
REQ A2
D0
D1
D2
D3
D4
D5
D6
D7
REDY
ACT
REQ A3
VR801 10k
VR802 10k
D801
D802
AXX1005
REMOTE CONTROL SENCER
-25.7
-34.0
5.0
4.9
2.5
R821 10k
D813
D812
VSX-7300 TYPE ONLY
R834 10k×5
4.6
0
FRONT CONTROL B ASSEMBLY
REAR UP S823
REAR DOWN S824
L S831
R S832
MUTE S833
R804 47k
R805 47k
IC801
IC801: MICRO COMPUTER
KEY SCAN, REMOTE CONTROL SIGNAL DECORD & DISPLAY CONTROL
REMOTE CONTROL
R803 4.7k
R802 4.7k
R801 47k
Q801
Q801: RESET
X801 ASS1004 4.19MHz
C801 100p
C802 100p
C807 0.1/50
C803 10/16
C805 10/16
L801 10μH
C806 10/16
Q802
Q803
Q804
Q805
Q806
Q807
Q808
Q809
Q810
Q811
TUNING UP S801
TUNING DOWN S802
ST1 S803
ST2 S804
FM S808
AM S809
ST6 S810
ST7 S811
TUNING MODE S815
DIRECT A.T. S816
FM MODE S817
MEMORY S818
S.S S825
V.SE S826
TAPE2 DAT2 S834
TREBLE UP S839
TREBLE DOWN S840
ACOUSTIC MEMORY S841
ACOUSTIC SELECT S842
BASS UP S847
BASS DOWN S848
VCR NOISE FILTER S849
ENHANCE S850
CENTER MODE S856
SURROUND TEST TONE S855
SP-A S857
REC ENHANCER S862
SP (REAR) S863
VSX-9300S
D80
D810
D811
SPEAKERS
BALANCE
REAR
STADIUM
SIMULATED
DOLBY SURROUND
PRO LOGIC CENTER MODE
OFF NORMAL WIDE PHANTOM
TV-ANT
DELAY TIME (mS)
VCR RECORDING
VCR 1 MONO
VCR2
VDP
TV
VIDEO SIGNAL
TAPE 2
VIDEO ADAPTOR
VCR NOISE FILTER
ENHANCER ON OFF REC
STATION
AUTO
SCAN
SLEEP
TUNED
SEARCH
MUTING
SIMULATED STEREO
STEREO
MEMORY
TONE
FM MONO
ACOUSTIC LOUDNESS
REAR FRONT LEFT
CENTER
FRONT REAR RIGHT
+8dB
+6dB
+4dB
+2dB
0dB
-2dB
-4dB
-6dB
-8dB

PIN CONNECTION

PIN NO.	50	49	48	47	46	45	44	43	42	41	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1
CONNECTION	N	N	N	N	N	N	N	N	Fd	Fd	N	N	N	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	N	N	F	F
	P	P	P	P	P	P	P	P			P	P	P	32	31	30	29	28	27	26	25	24	23	0	1	2	3	4	5	6	7	11	22	8	21	20	19	18	17	16	15	14	13	12	10	9	P	P	1	1

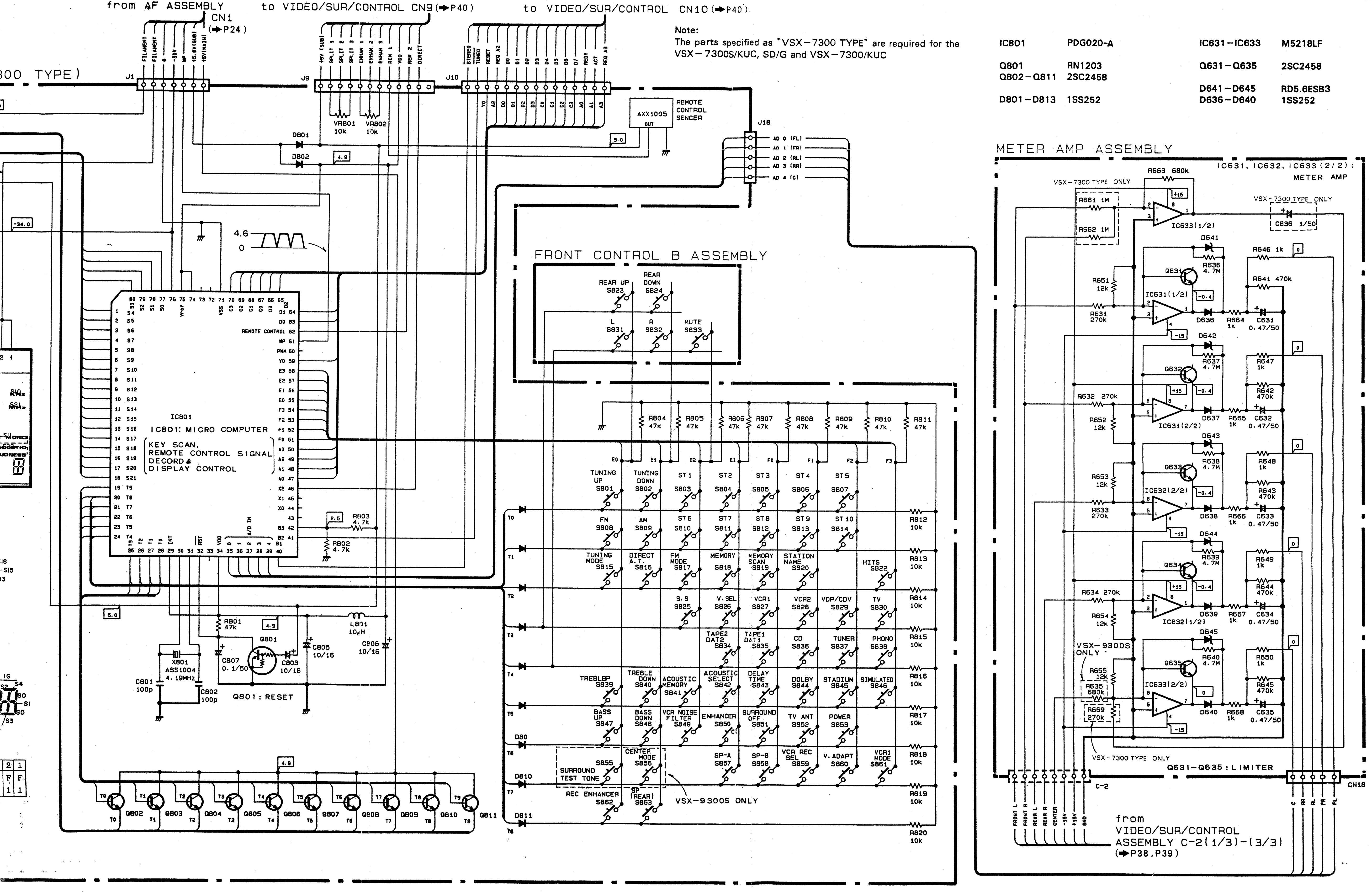
PIN NO.	94	93	92	91	90	89	88	87	86	85	84	83	82	81	80	79	78	77	76	75	74	73	72	71	70	69	68	67	66	65	64	63	62	61	60	59	58	57	56	55	54	53	52	51
CONNECTION	F	F	N	N	10	9	8	7	6	5	4	3	2	1	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
	2	2	P	P	G	G	G	G	G	G	G	G	G	G	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P

NOTE:Fd=Filament dumper

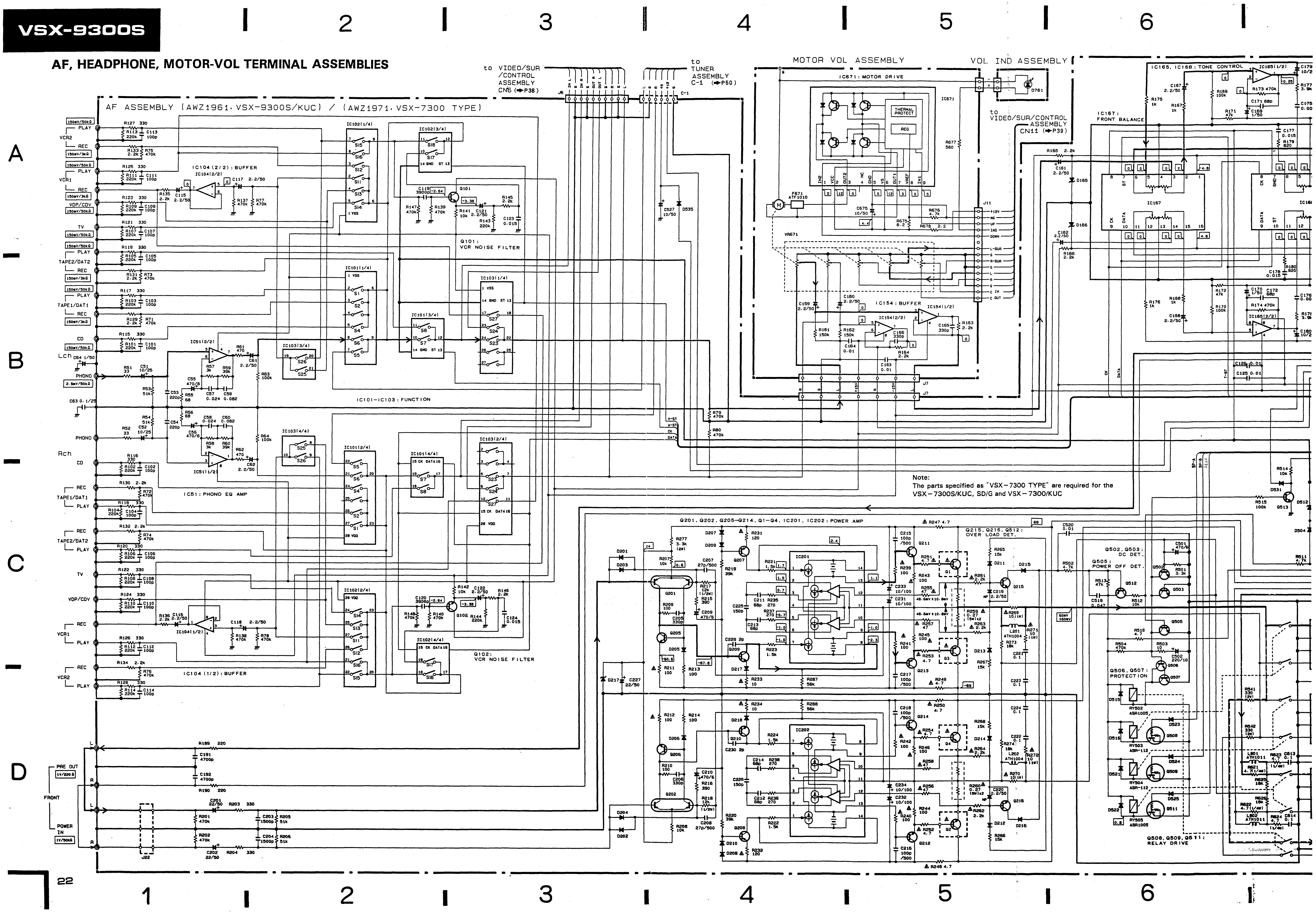
VSX-9300S

Note:
The parts specified as "VSX−7300 TYPE" are required for the VSX−7300S/KUC, SD/G and VSX−7300/KUC

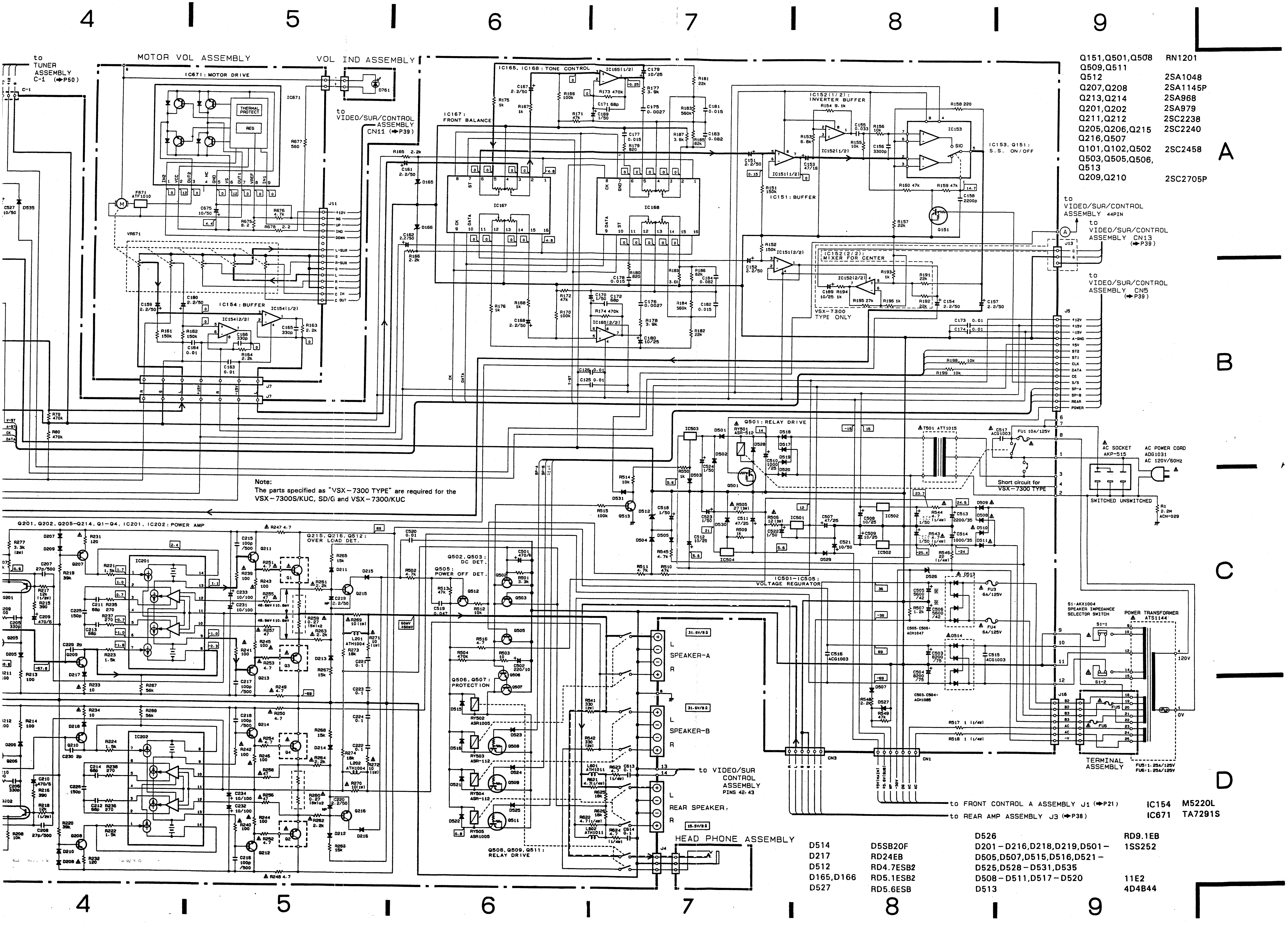
IC801	PDG020-A	IC631−IC633	M5218LF
Q801 Q802−Q811	RN1203 2SC2458	Q631−Q635	2SC2458
D801−D813	1SS252	D641−D645 D636−D640	RD5.6ESB3 1SS252


from AF ASSEMBLY CN1 (➡P24)
to VIDEO/SUR/CONTROL CN9 (➡P40)
to VIDEO/SUR/CONTROL CN10 (➡P40)
300 TYPE)
J1
J9
J10
J18
FILAMENT
FILAMENT
G
-30V
WP
+5.6V(SUB)
+5V(MAIN)
+5V (SUB)
SPLIT 1
SPLIT 2
SPLIT 3
ENHAN 1
ENHAN 2
ENHAN 3
REM 1
VDD
REM 2
DIRECT
STEREO
TUNED
RESET
REQ A2
D0
D1
D2
D3
D4
D5
D6
D7
REDY
ACT
REQ A3
VR801 10k
VR802 10k
AXX1005
REMOTE CONTROL SENCER
D801
D802
5.0
4.9
-34.0
4.6
0
AD 0 (FL)
AD 1 (FR)
AD 2 (RL)
AD 3 (RR)
AD 4 (C)
IC801
IC801: MICRO COMPUTER
KEY SCAN, REMOTE CONTROL SIGNAL DECORD & DISPLAY CONTROL
REMOTE CONTROL
R803 4.7k
R802 4.7k
2.5
R801 47k
Q801
C807 0.1/50
C803 10/16
C805 10/16
C806 10/16
L801 10μH
X801 ASS1004 4.19MHz
C801 100p
C802 100p
Q801: RESET
Q802
Q803
Q804
Q805
Q806
Q807
Q808
Q809
Q810
Q811
T0
T1
T2
T3
T4
T5
T6
T7
T8
T9
FRONT CONTROL B ASSEMBLY
REAR UP S823
REAR DOWN S824
L S831
R S832
MUTE S833
R804 47k
R805 47k
R806 47k
R807 47k
R808 47k
R809 47k
R810 47k
R811 47k
E0
E1
E2
E3
F0
F1
F2
F3
TUNING UP S801
TUNING DOWN S802
ST1 S803
ST2 S804
ST3 S805
ST4 S806
ST5 S807
FM S808
AM S809
ST6 S810
ST7 S811
ST8 S812
ST9 S813
ST10 S814
TUNING MODE S815
DIRECT A.T. S816
FM MODE S817
MEMORY S818
MEMORY SCAN S819
STATION NAME S820
HITS S822
S.S S825
V.SEL S826
VCR1 S827
VCR2 S828
VDP/CDV S829
TV S830
TAPE2 DAT2 S834
TAPE1 DAT1 S835
CD S836
TUNER S837
PHONO S838
TREBLBP S839
TREBLE DOWN S840
ACOUSTIC MEMORY S841
ACOUSTIC SELECT S842
DELAY TIME S843
DOLBY S844
STADIUM S845
SIMULATED S846
BASS UP S847
BASS DOWN S848
VCR NOISE FILTER S849
ENHANCER S850
SURROUND OFF S851
TV ANT S852
POWER S853
SURROUND TEST TONE S855
CENTER MODE S856
SP-A S857
SP-B S858
VCR REC SEL S859
V.ADAPT S860
VCR1 MODE S861
REC ENHANCER S862
SP (REAR) S863
VSX−9300S ONLY
D80
D810
D811
R812 10k
R813 10k
R814 10k
R815 10k
R816 10k
R817 10k
R818 10k
R819 10k
R820 10k
METER AMP ASSEMBLY
IC631, IC632, IC633 (2/2): METER AMP
VSX−7300 TYPE ONLY
R663 680k
R661 1M
R662 1M
IC633(1/2)
C636 1/50
D641
R646 1k
R636 4.7M
Q631
R651 12k
IC631(1/2)
R641 470k
R631 270k
D636
R664 1k
C631 0.47/50
D642
R637 4.7M
Q632
R647 1k
R642 470k
R632 270k
R652 12k
IC631(2/2)
D637
R665 1k
C632 0.47/50
D643
R638 4.7M
Q633
R648 1k
R653 12k
IC632(2/2)
R643 470k
R633 270k
D638
R666 1k
C633 0.47/50
D644
R639 4.7M
Q634
R649 1k
R644 470k
R634 270k
R654 12k
IC632(1/2)
D639
R667 1k
C634 0.47/50
D645
R640 4.7M
Q635
R650 1k
VSX−9300S ONLY
R655 12k
R635 680k
IC633(2/2)
R645 470k
R669 270k
D640
R668 1k
C635 0.47/50
+15
-15
-0.4
0
Q631−Q635: LIMITER
C-2
CN18
FRONT L
FRONT R
REAR L
REAR R
CENTER
-15V
+15V
GND
C
RR
RL
FR
FL
from VIDEO/SUR/CONTROL ASSEMBLY C-2(1/3)-(3/3) (➡P38, P39)
A
B
C
D

AF, HEADPHONE, MOTOR-VOL TERMINAL ASSEMBLIES


1
2
3
4
5
6
A
B
C
D
to VIDEO/SUR /CONTROL ASSEMBLY CN6 (➡P38)
to TUNER ASSEMBLY C-1 (➡P50)
MOTOR VOL ASSEMBLY
VOL IND ASSEMBLY
AF ASSEMBLY (AWZ1961, VSX-9300S/KUC) / (AWZ1971, VSX-7300 TYPE)
IC671: MOTOR DRIVE
THERMAL PROTECT
REG
to VIDEO/SUR/CONTROL ASSEMBLY CN11 (➡P39)
IC165, IC168: TONE CONTROL
IC167: FRONT BALANCE
IC104(2/2): BUFFER
IC104(1/2): BUFFER
Q101: VCR NOISE FILTER
Q102: VCR NOISE FILTER
IC154: BUFFER
IC101–IC103: FUNCTION
IC51: PHONO EQ AMP
Q201, Q202, Q205–Q214, Q1–Q4, IC201, IC202: POWER AMP
Q215, Q216, Q512: OVER LOAD DET.
Q502, Q503: DC DET.
Q505: POWER OFF DET.
Q506, Q507: PROTECTION
Q508, Q509, Q511: RELAY DRIVE
VCR2 PLAY REC
VCR1 PLAY REC
VDP/CDV
TV
TAPE2/DAT2 PLAY REC
TAPE1/DAT1 PLAY REC
CD
Lch PHONO
Rch
FRONT PRE OUT
POWER IN

Note:
The parts specified as "VSX−7300 TYPE" are required for the VSX−7300S/KUC, SD/G and VSX−7300/KUC


4
5
6
7
8
9
A
B
C
D
to TUNER ASSEMBLY C-1 (➡P50)
MOTOR VOL ASSEMBLY
VOL IND ASSEMBLY
IC671: MOTOR DRIVE
THERMAL PROTECT
REG
to VIDEO/SUR/CONTROL ASSEMBLY CN11 (➡P39)
IC165, IC168: TONE CONTROL
IC167: FRONT BALANCE
IC152(1/2): INVERTER BUFFER
IC153, Q151: S.S. ON/OFF
IC151: BUFFER
IC152(2/2): MIXER FOR CENTER
VSX−7300 TYPE ONLY
IC154: BUFFER
IC167
IC168
IC153
to VIDEO/SUR/CONTROL ASSEMBLY 44PIN
to VIDEO/SUR/CONTROL ASSEMBLY CN13 (➡P39)
to VIDEO/SUR/CONTROL ASSEMBLY CN5 (➡P39)
J11
J13
J5
J7
Q201, Q202, Q205–Q214, Q1–Q4, IC201, IC202: POWER AMP
Q215, Q216, Q512: OVER LOAD DET.
Q502, Q503: DC DET.
Q505: POWER OFF DET.
Q506, Q507: PROTECTION
Q508, Q509, Q511: RELAY DRIVE
Q501: RELAY DRIVE
IC501–IC505: VOLTAGE REGURATOR
T501 ATT1015
AC SOCKET AKP-515
AC POWER CORD ADG1031 AC 120V/60Hz
Short circuit for VSX−7300 TYPE
SWITCHED UNSWITCHED
S1: AKX1004 SPEAKER IMPEDANCE SELECTOR SWITCH
POWER TRANSFORMER ATS1144
SPEAKER-A
SPEAKER-B
REAR SPEAKER
to VIDEO/SUR CONTROL ASSEMBLY PINS 42, 43
HEAD PHONE ASSEMBLY
TERMINAL ASSEMBLY
FU5: 1.25A/125V
FU6: 1.25A/125V
to FRONT CONTROL A ASSEMBLY J1 (➡P21)
to REAR AMP ASSEMBLY J3 (➡P38)
CN3
CN1
J16
J4
120V
0V

Note:
The parts specified as "VSX−7300 TYPE" are required for the VSX−7300S/KUC, SD/G and VSX−7300/KUC

Q151,Q501,Q508 Q509,Q511	RN1201
Q512	2SA1048
Q207,Q208	2SA1145P
Q213,Q214	2SA968
Q201,Q202	2SA979
Q211,Q212	2SC2238
Q205,Q206,Q215 Q216,Q507	2SC2240
Q101,Q102,Q502 Q503,Q505,Q506, Q513	2SC2458
Q209,Q210	2SC2705P

IC154	M5220L
IC671	TA7291S

D514	D5SB20F
D217	RD24EB
D512	RD4.7ESB2
D165,D166	RD5.1ESB2
D527	RD5.6ESB

D526	RD9.1EB
D201−D216,D218,D219,D501− D505,D507,D515,D516,D521− D525,D528−D531,D535	1SS252
D508−D511,D517−D520	11E2
D513	4D4B44

5.3 AF, HEADPHONE, MOTOR-VOL TERMINAL ASSEMBLIES

NOTE

1. This P.C.B connection diagram is viewed from the parts mounted side.
2. The parts which have been mounted on the board can be replaced with those shown with the corresponding wiring symbols listed in the following Table.

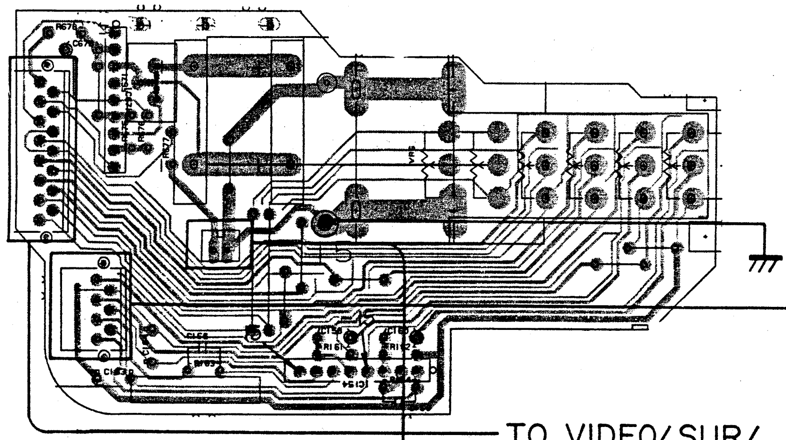
P.C.B. pattern diagram indication	Corresponding part symbol	Part Name
Q504 E	E or E	Transistor
Q215	or	Radiator type transistor
D203	D203	Diode
R237	R237	Resistor
C513	+	Capacitor (Polarity)
C518		Capacitor (Non-polarity)

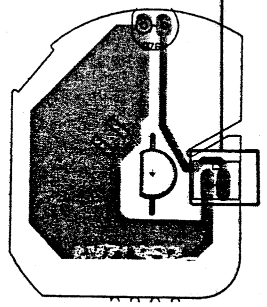
Others

P.C.B. pattern diagram indication	Part Name
IC	IC
S	Switch
RY	Relay
L	Coil
F	Filter
VR	Variable resistor or Semi-fixed resistor

3. The capactor terminal marked with ◎(double circles) shows negatine termianl.
4. The diode terminal marked with ◎(double circles) shows cathode side.
5. The transistor terminal to which E is affixed shows the emitter.

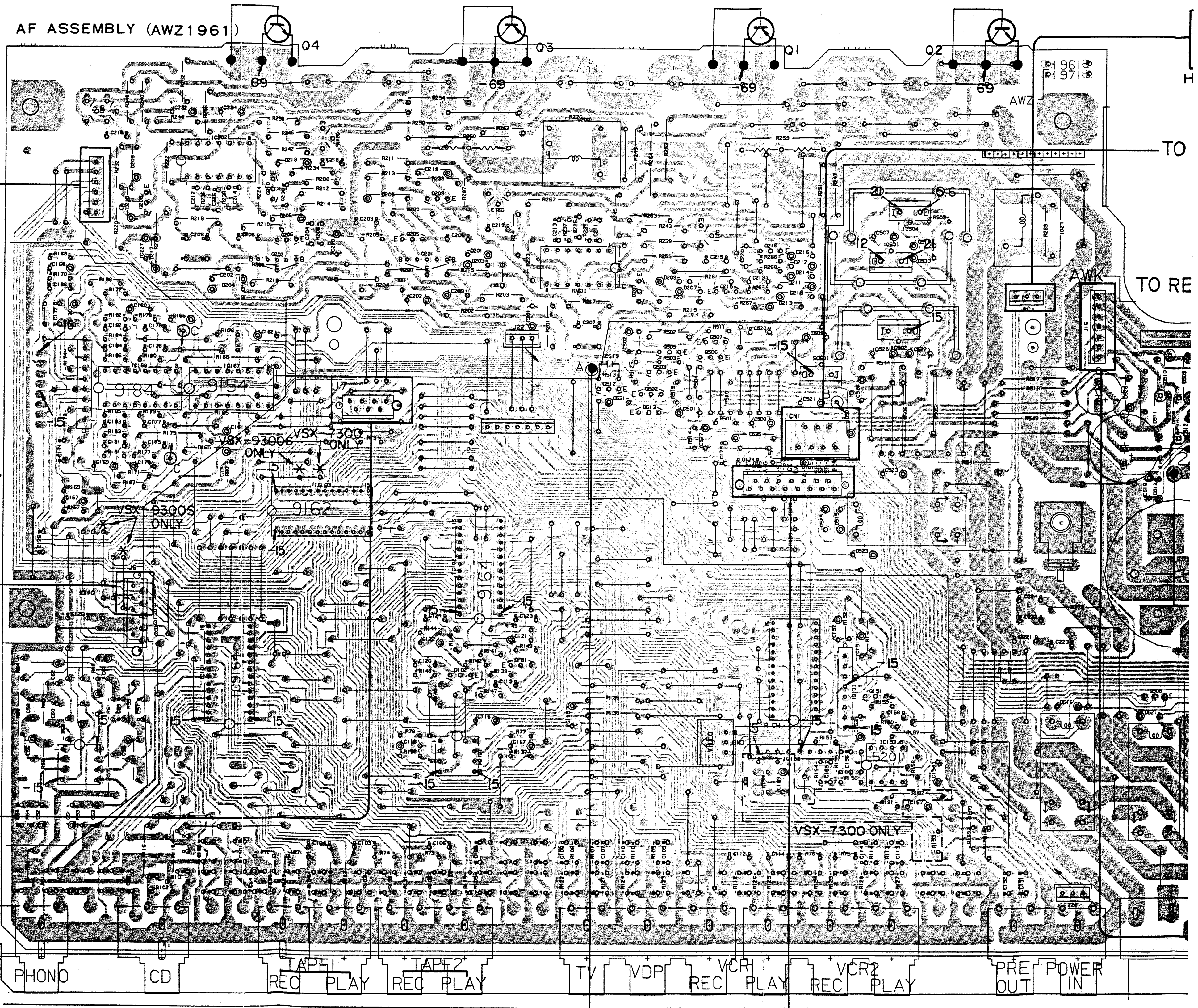
MOTOR VOLUME ASSEMBLY

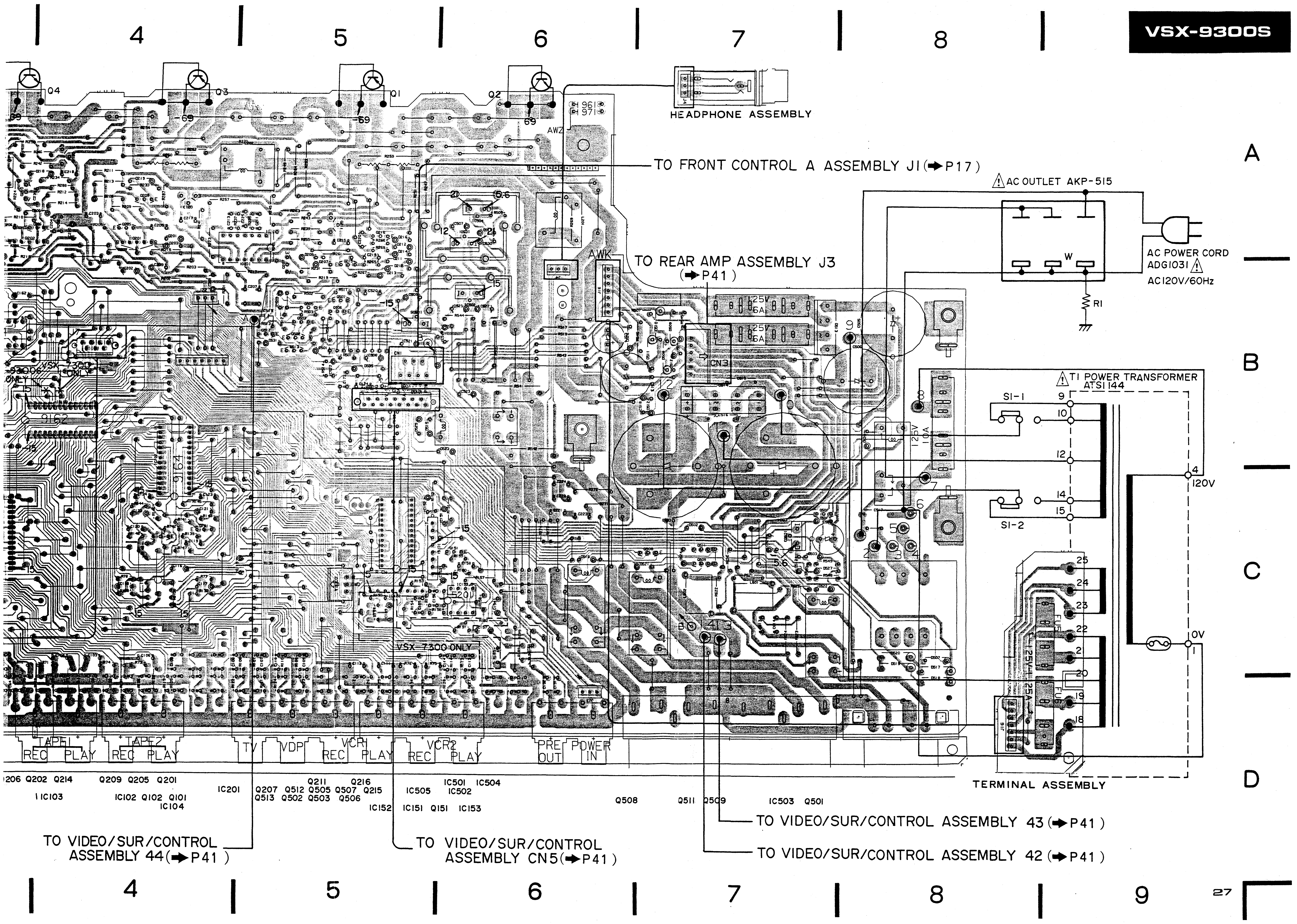


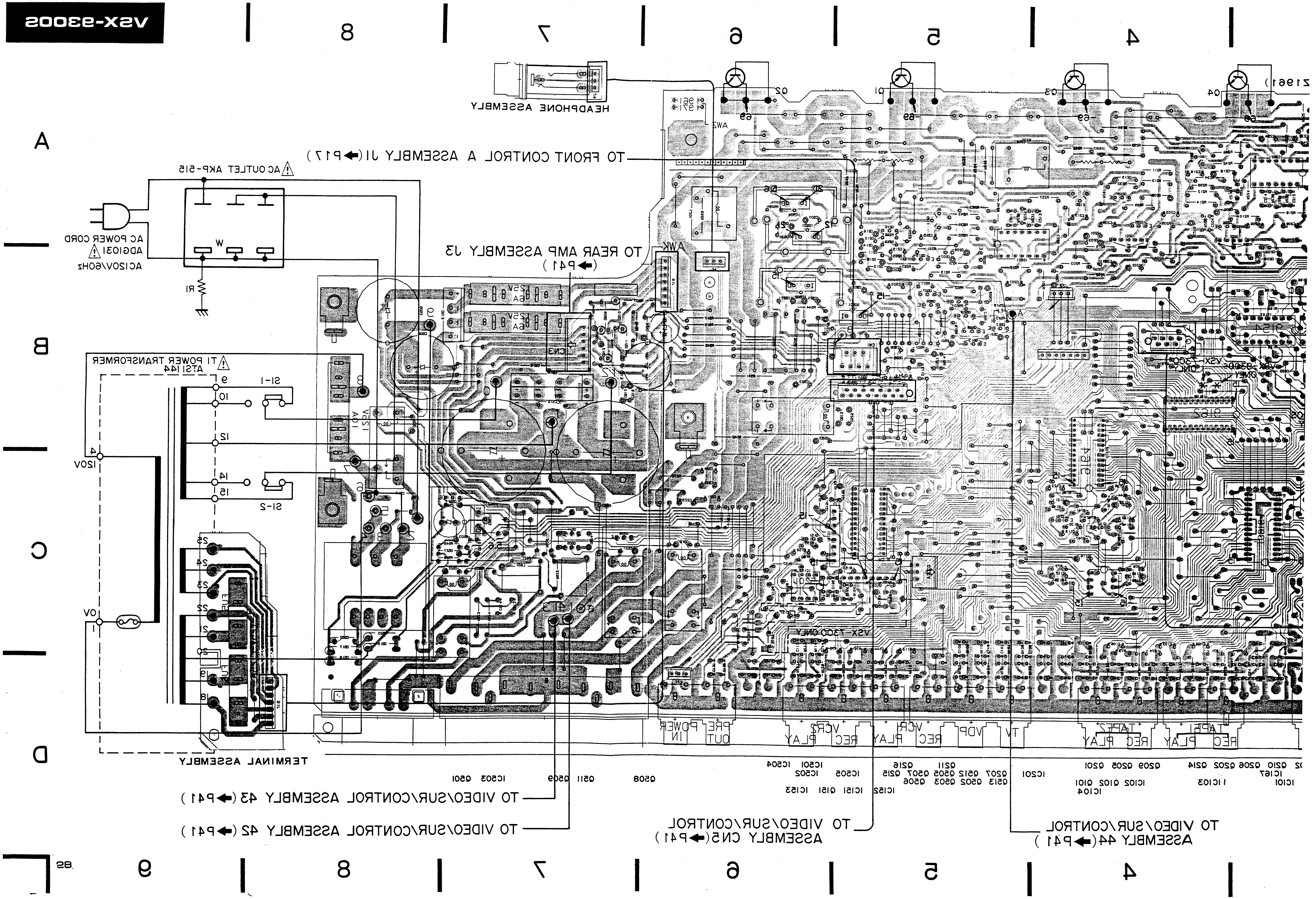


VOL IND ASSEMBLY

AF ASSEMBLY (AWZ1961)

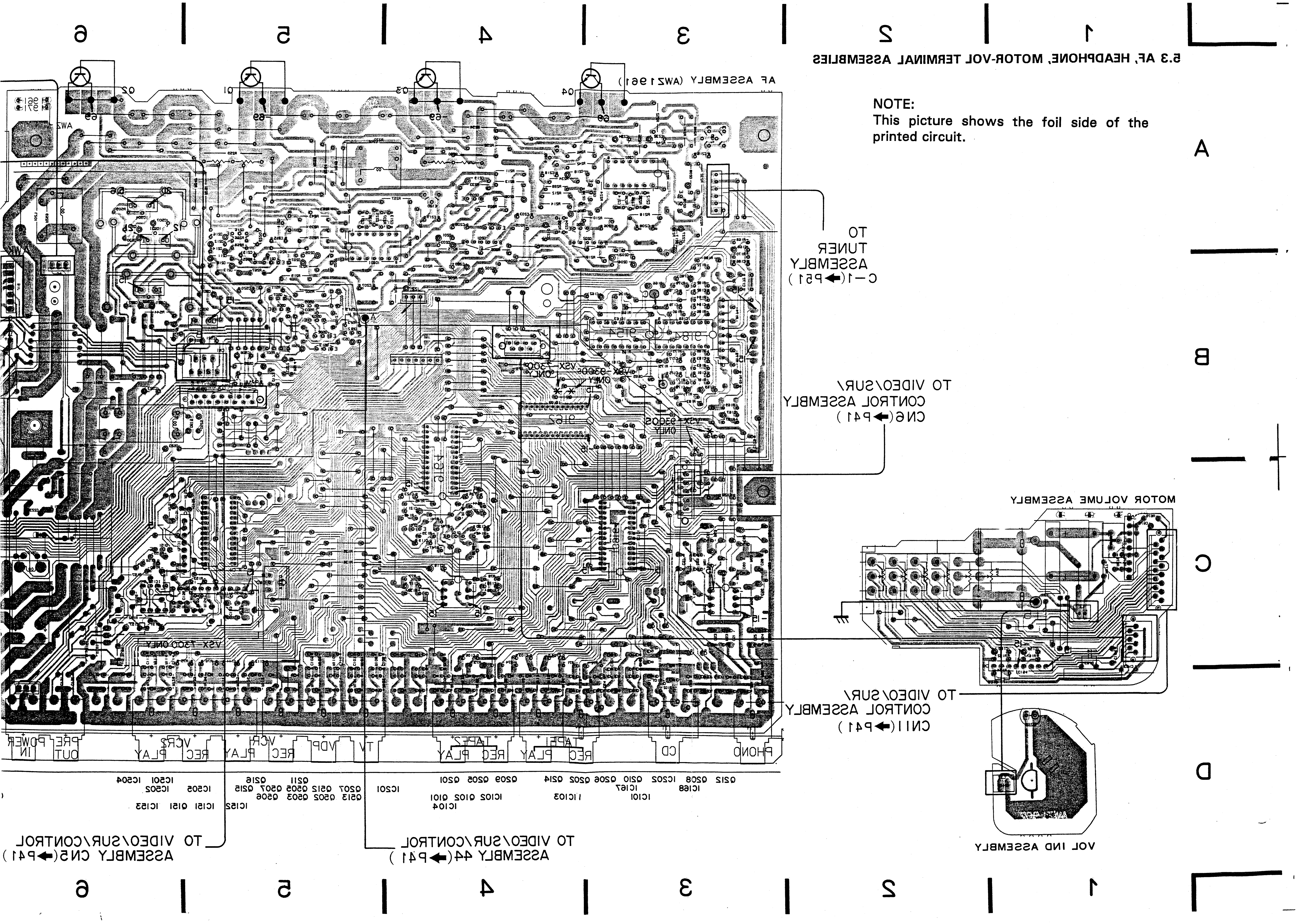

Q4
Q3
Q1
Q2
69
-69
AWZ
961
971
AWK
TO
TO RE
TO TUNER ASSEMBLY C-1(➔P51)
TO VIDEO/SUR/CONTROL ASSEMBLY CN6(➔P41)
TO VIDEO/SUR/CONTROL ASSEMBLY CN11(➔P41)
VSX-9300S ONLY
VSX-7300 ONLY
VSX-7300 ONLY
9184
9151
9162
9164
9161
-15
15
CN1
PHONO
CD
TAPE1
REC
PLAY
TAPE2
REC
PLAY
TV
VDP
VCR1
REC
PLAY
VCR2
REC
PLAY
PRE OUT
POWER IN
Q212 Q208 IC168 IC202 Q210 IC167 IC101 Q206 Q202 Q214 IC103
Q209 Q205 Q201 IC102 Q102 Q101 IC104
IC201
Q207 Q513 Q512 Q502 Q211 Q505 Q503 Q216 Q507 Q506 Q215
IC152
IC505 IC151 Q151 IC501 IC502 IC504 IC153
Q508
TO VIDEO/SUR/CONTROL ASSEMBLY 44(➔P41)
TO VIDEO/SUR/CONTROL ASSEMBLY CN5(➔P41)


4
5
6
7
8
HEADPHONE ASSEMBLY
TO FRONT CONTROL A ASSEMBLY J1(➡P17)
⚠AC OUTLET AKP-515
W
AC POWER CORD
ADG1031⚠
AC120V/60Hz
R1
TO REAR AMP ASSEMBLY J3
(➡P41)
AWZ
AWK
125V 6A
125V 6A
125V 10A
CN1
CN3
⚠T1 POWER TRANSFORMER
ATS1144
S1-1
S1-2
9
10
12
14
15
4
120V
0V
1
25
24
23
22
2
20
19
18
FU5
FU6
125V
TERMINAL ASSEMBLY
VSX-7300 ONLY
VSX-9300S ONLY
TAPE1
REC
PLAY
TAPE2
REC
PLAY
TV
VDP
VCR1
REC
PLAY
VCR2
REC
PLAY
PRE OUT
POWER IN
Q4
Q3
Q1
Q2
Q206 Q202 Q214
IC103
Q209 Q205 Q201
IC102 Q102 Q101
IC104
IC201
Q207 Q512 Q211 Q505 Q216 Q507 Q215
Q513 Q502 Q503 Q506
IC505
IC501 IC504
IC502
IC152 IC151 Q151 IC153
Q508
Q511 Q509
IC503 Q501
TO VIDEO/SUR/CONTROL ASSEMBLY 43 (➡P41)
TO VIDEO/SUR/CONTROL ASSEMBLY 42 (➡P41)
TO VIDEO/SUR/CONTROL ASSEMBLY 44(➡P41)
TO VIDEO/SUR/CONTROL ASSEMBLY CN5(➡P41)
A
B
C
D
4
5
6
7
8
9


8
7
6
5
4
A
B
C
D
HEADPHONE ASSEMBLY
Q1
Q2
Q3
Q4
TO FRONT CONTROL A ASSEMBLY J1 (→P17)
AC OUTLET AKP-515
AC POWER CORD ADG1031
AC120V/60Hz
W
R1
TO REAR AMP ASSEMBLY J3 (→P41)
T1 POWER TRANSFORMER ATS1144
S1-1
S1-2
120V
0V
TERMINAL ASSEMBLY
VSX-7300 ONLY
VSX-9300S ONLY
POWER IN
PRE OUT
VCR2 PLAY REC
VCR1 PLAY REC
VDP
TV
TAPE2 PLAY REC
TAPE1 PLAY REC
TO VIDEO/SUR/CONTROL ASSEMBLY 43 (→P41)
TO VIDEO/SUR/CONTROL ASSEMBLY 42 (→P41)
TO VIDEO/SUR/CONTROL ASSEMBLY CN5 (→P41)
TO VIDEO/SUR/CONTROL ASSEMBLY 44 (→P41)
9
8
7
6
5
4

5.3 AF, HEADPHONE, MOTOR-VOL TERMINAL ASSEMBLIES

NOTE:
This picture shows the foil side of the printed circuit.

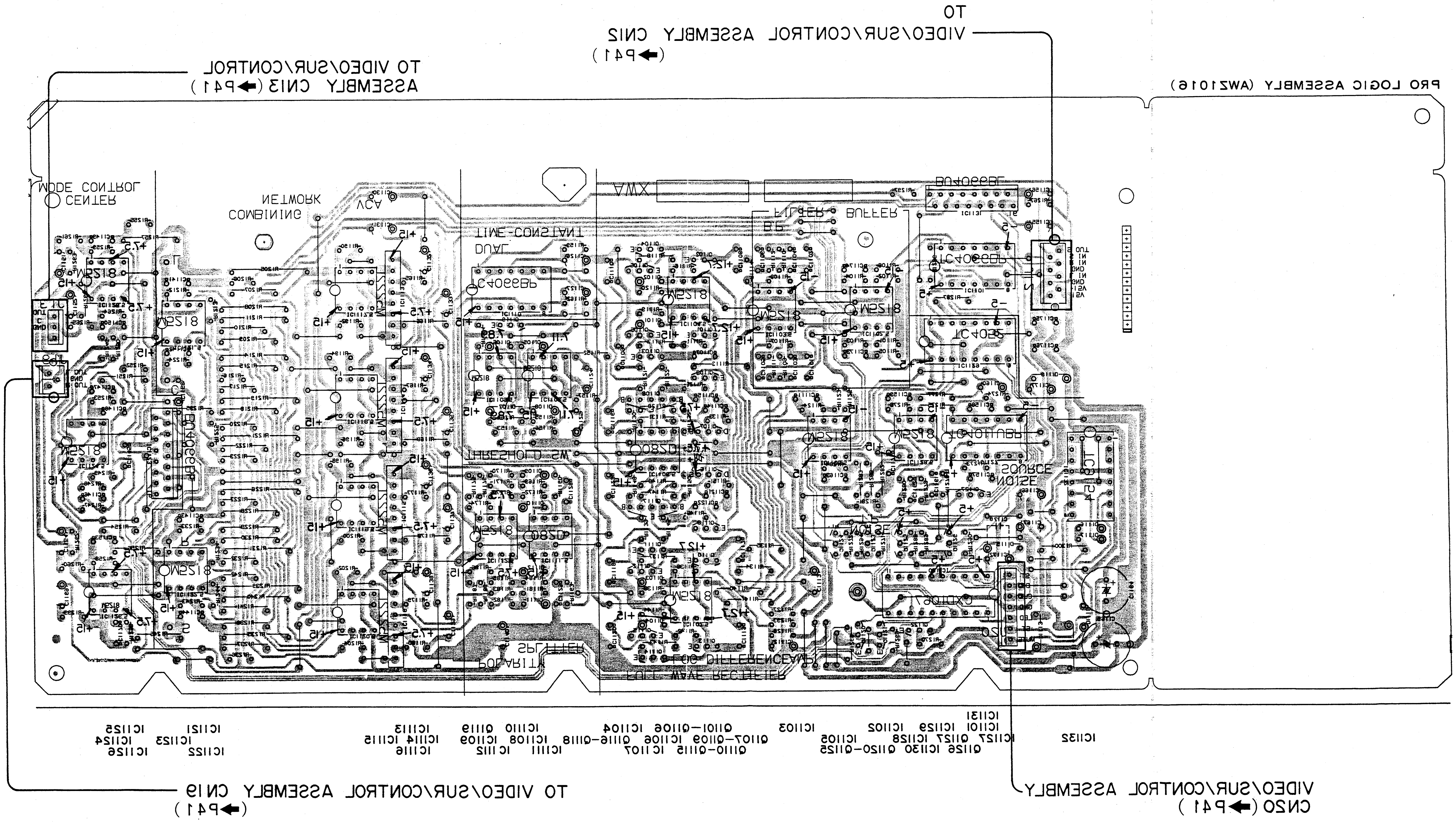


6
5
4
3
2
1
A
B
C
D
AF ASSEMBLY (AWZ1961)
Q1
Q2
Q3
Q4
TO TUNER ASSEMBLY C-1(→P51)
TO VIDEO/SUR/CONTROL ASSEMBLY CN6(→P41)
VSX-9300S ONLY
VSX-7300 ONLY
MOTOR VOLUME ASSEMBLY
TO VIDEO/SUR/CONTROL ASSEMBLY CN11(→P41)
VOL IND ASSEMBLY
PHONO
CD
TAPE1 REC PLAY
TAPE2 REC PLAY
TV
VDP
VCR1 REC PLAY
VCR2 REC PLAY
PRE OUT
POWER IN
TO VIDEO/SUR/CONTROL ASSEMBLY CN5(→P41)
TO VIDEO/SUR/CONTROL ASSEMBLY 44(→P41)
Q212 Q208 IC202 Q210 Q206 Q202 Q214
IC168 IC167 IC101 IC103
Q209 Q205 Q201
IC102 Q102 Q101 IC104
IC201
Q207 Q512 Q211 Q216
Q513 Q502 Q503 Q506 Q505 Q507 Q215
IC505 IC501 IC504 IC502
IC152 IC151 Q151 IC153

5.4 PRO LOGIC ASSEMBLY

VSX-9300S ONLY

NOTE:
This picture shows the foil side of the printed circuit.


A
B
C
D
TO VIDEO/SUR/CONTROL ASSEMBLY CN13 (➡P41)
TO VIDEO/SUR/CONTROL ASSEMBLY CN12 (➡P41)
PRO LOGIC ASSEMBLY (AWZ1016)
MODE CONTROL
CENTER
COMBINING NETWORK
VCA
DUAL TIME-CONSTANT
AWX
BPF
FILTER
BUFFER
THRESHOLD
POLARITY SPLITTER
LOG DIFFERENCE AMP
FULL WAVE RECTIFIER
NOISE SOURCE
ATTENUATOR
IC1132
IC1131
IC1101 IC1129 IC1102
IC1127 Q127 IC1128 IC1105
Q126 IC1130 Q120–Q125
IC1103
Q101–Q106 IC1104
Q107–Q109 IC1106 Q116–Q118
IC1107 Q110–Q115
IC1110 Q119
IC1108 IC1109
IC1111 IC1112
IC1113
IC1114 IC1115
IC1116
IC1121 IC1125
IC1123 IC1124
IC1122 IC1126
VIDEO/SUR/CONTROL ASSEMBLY CN20 (➡P41)
TO VIDEO/SUR/CONTROL ASSEMBLY CN19 (➡P41)

5.4 PRO LOGIC ASSEMBLY
VSX-9300S ONLY

NOTE

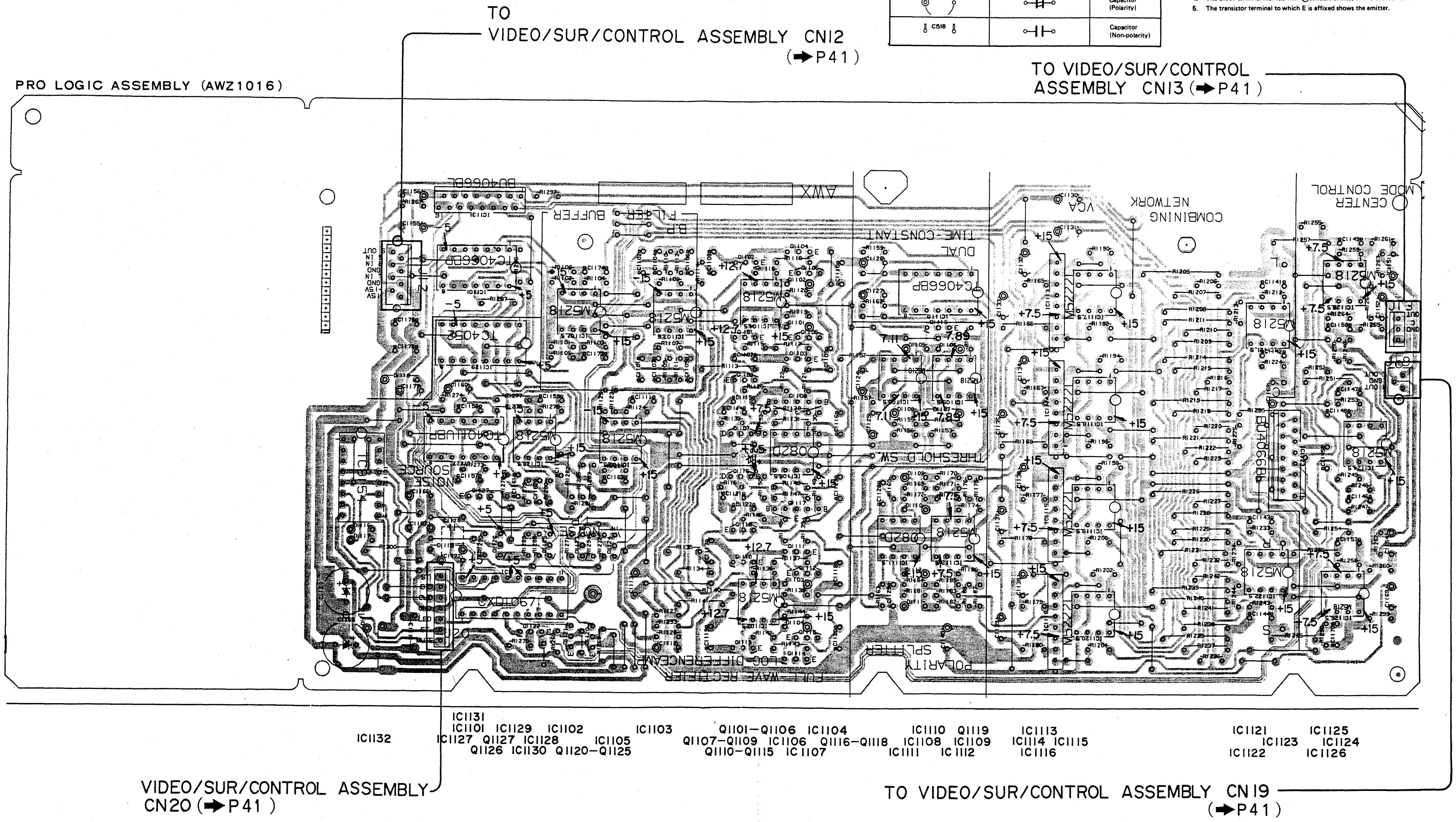
1. This P.C.B connection diagram is viewed from the parts mounted side.
2. The parts which have been mounted on the board can be replaced with those shown with the corresponding wiring symbols listed in the following Table.

P.C.B. pattern diagram indication	Corresponding part symbol	Part Name
E Q504	E or E	Transistor
Q215	or	Radiator type transistor
D203	D203	Diode
R237	R237	Resistor
C513	+	Capacitor (Polarity)
C518		Capacitor (Non-polarity)

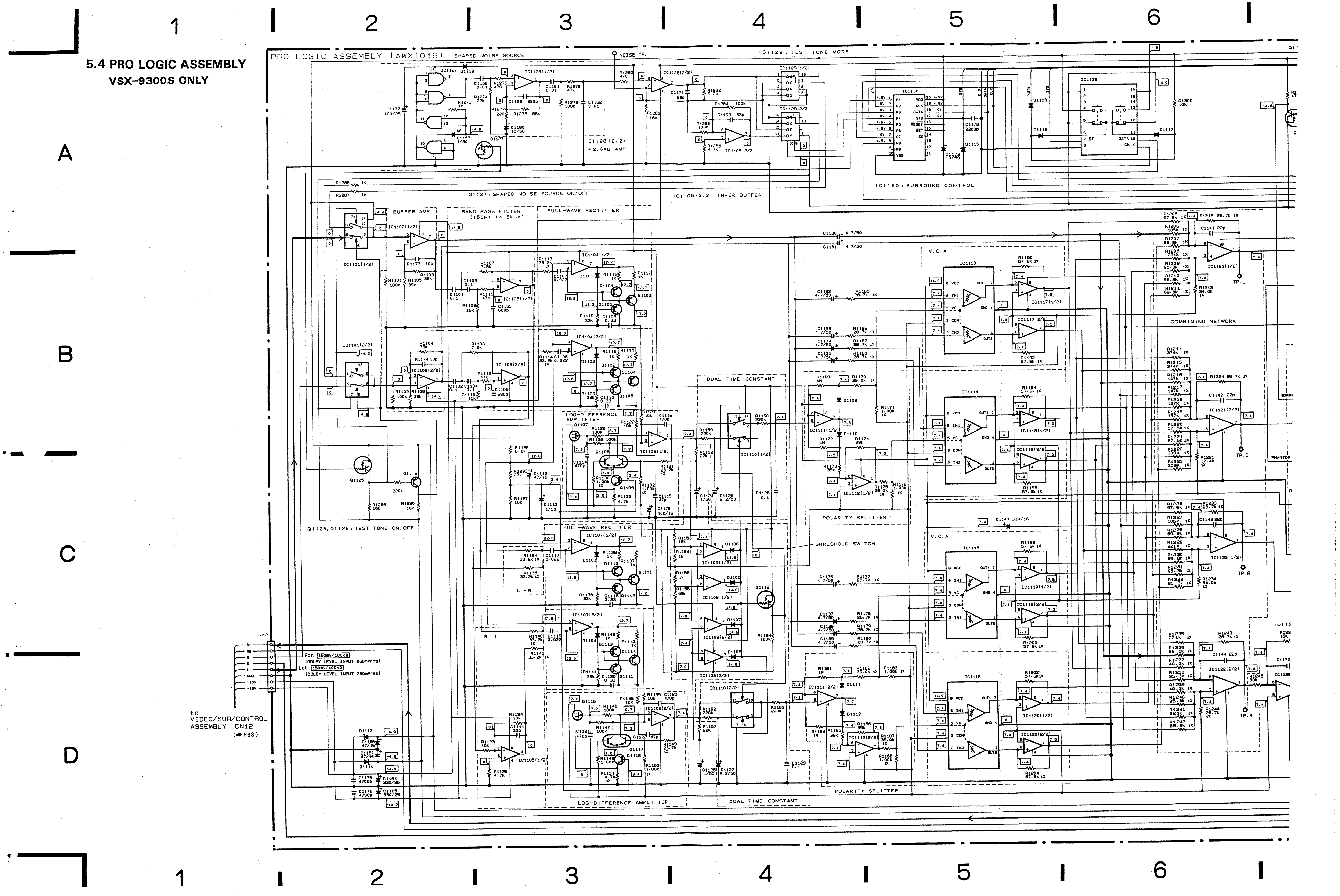
Others

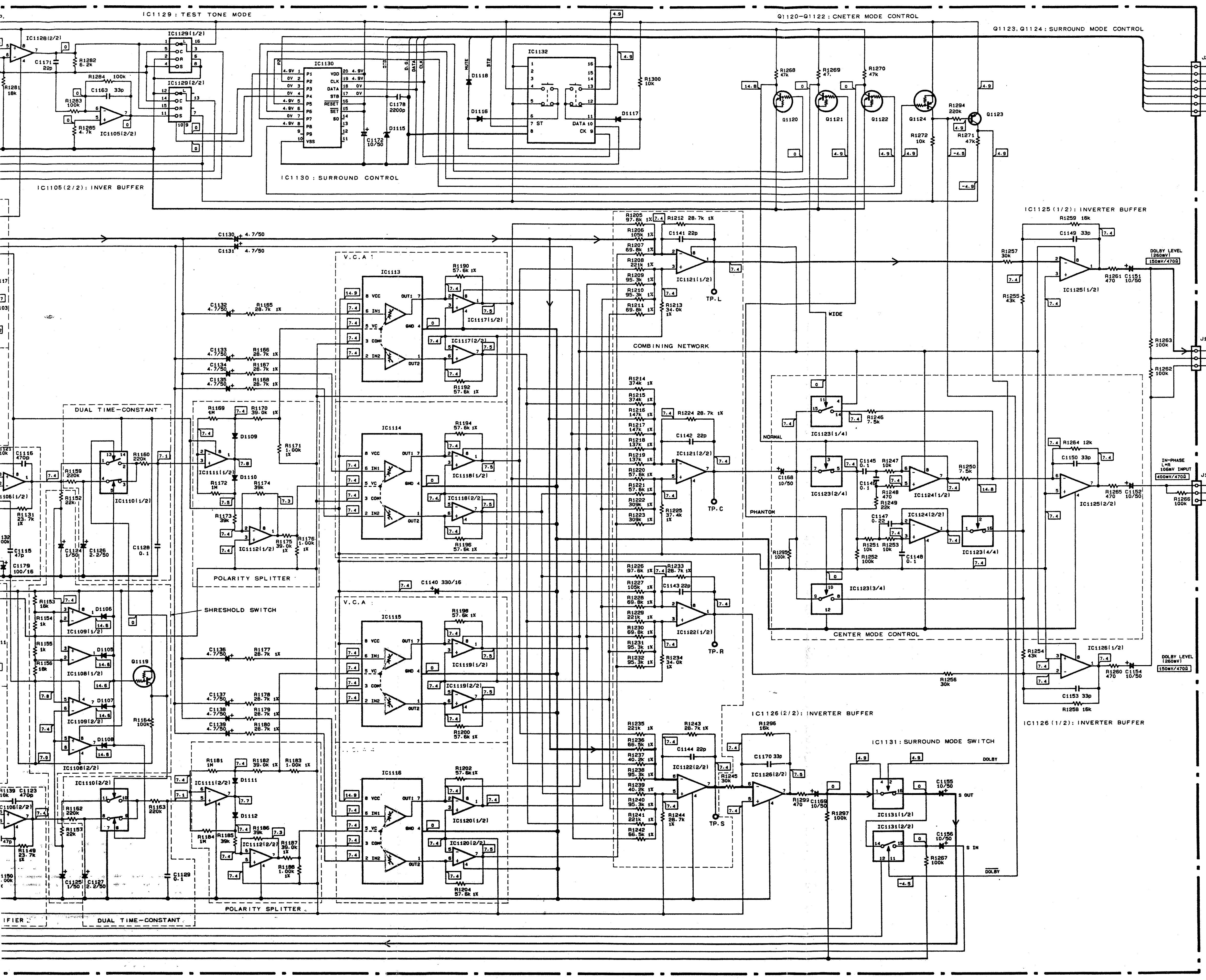
P.C.B. pattern diagram indication	Part Name
IC	IC
S	Switch
RY	Relay
L	Coil
F	Filter
VR	Variable resistor or Semi-fixed resistor

3. The capactor terminal marked with ◎(double circles) shows negatine termianl.
4. The diode terminal marked with ◎(double circles) shows cathode side.
5. The transistor terminal to which E is affixed shows the emitter.


TO
VIDEO/SUR/CONTROL ASSEMBLY CN12
(➡P41)
TO VIDEO/SUR/CONTROL
ASSEMBLY CN13 (➡P41)
PRO LOGIC ASSEMBLY (AWZ1016)
BU4066BL
BUFFER
FILTER
AWX
DUAL TIME-CONSTANT
VCA
COMBINING NETWORK
CENTER MODE CONTROL
TC4066BP
TC4052
NOISE SOURCE
THRESHOLD SW
FULL WAVE RECTIFIER
LOG DIFFERENCEAMP
POLARITY SPLITTER
M5218
IC1131
IC1101 IC1129 IC1102
IC1127 Q1127 IC1128
Q1126 IC1130 Q1120–Q1125
IC1132
IC1105
IC1103
Q1101–Q1106 IC1104
Q1107–Q1109 IC1106 Q1116–Q1118
Q1110–Q1115 IC1107
IC1110 Q1119
IC1108 IC1109
IC1111 IC1112
IC1113
IC1114 IC1115
IC1116
IC1121
IC1123
IC1122
IC1125
IC1124
IC1126
VIDEO/SUR/CONTROL ASSEMBLY
CN20 (➡P41)
TO VIDEO/SUR/CONTROL ASSEMBLY CN19
(➡P41)

5.4 PRO LOGIC ASSEMBLY
VSX-9300S ONLY


1
2
3
4
5
6
A
B
C
D
PRO LOGIC ASSEMBLY (AWX1016)
SHAPED NOISE SOURCE
NOISE TP.
IC1129: TEST TONE MODE
IC1128 (2/2): +2.6dB AMP
IC1130: SURROUND CONTROL
Q1127: SHAPED NOISE SOURCE ON/OFF
IC1105(2/2): INVER BUFFER
BUFFER AMP
BAND PASS FILTER (150Hz to 5kHz)
FULL-WAVE RECTIFIER
LOG-DIFFERENCE AMPLIFIER
DUAL TIME-CONSTANT
POLARITY SPLITTER
V.C.A
COMBINING NETWORK
SHRESHOLD SWITCH
L + R
R – L
Q1125, Q1126: TEST TONE ON/OFF
J12
Rch 150mV/100kΩ (DOLBY LEVEL INPUT 260mVrms)
Lch 150mV/100kΩ (DOLBY LEVEL INPUT 260mVrms)
S1
S2
R
S
L
GND
-15V
+15V
to VIDEO/SUR/CONTROL ASSEMBLY CN12 (➡P38)
TP.L
TP.C
TP.R
TP.S
IC1113
IC1114
IC1115
IC1116
IC1130
IC1132
PHANTOM

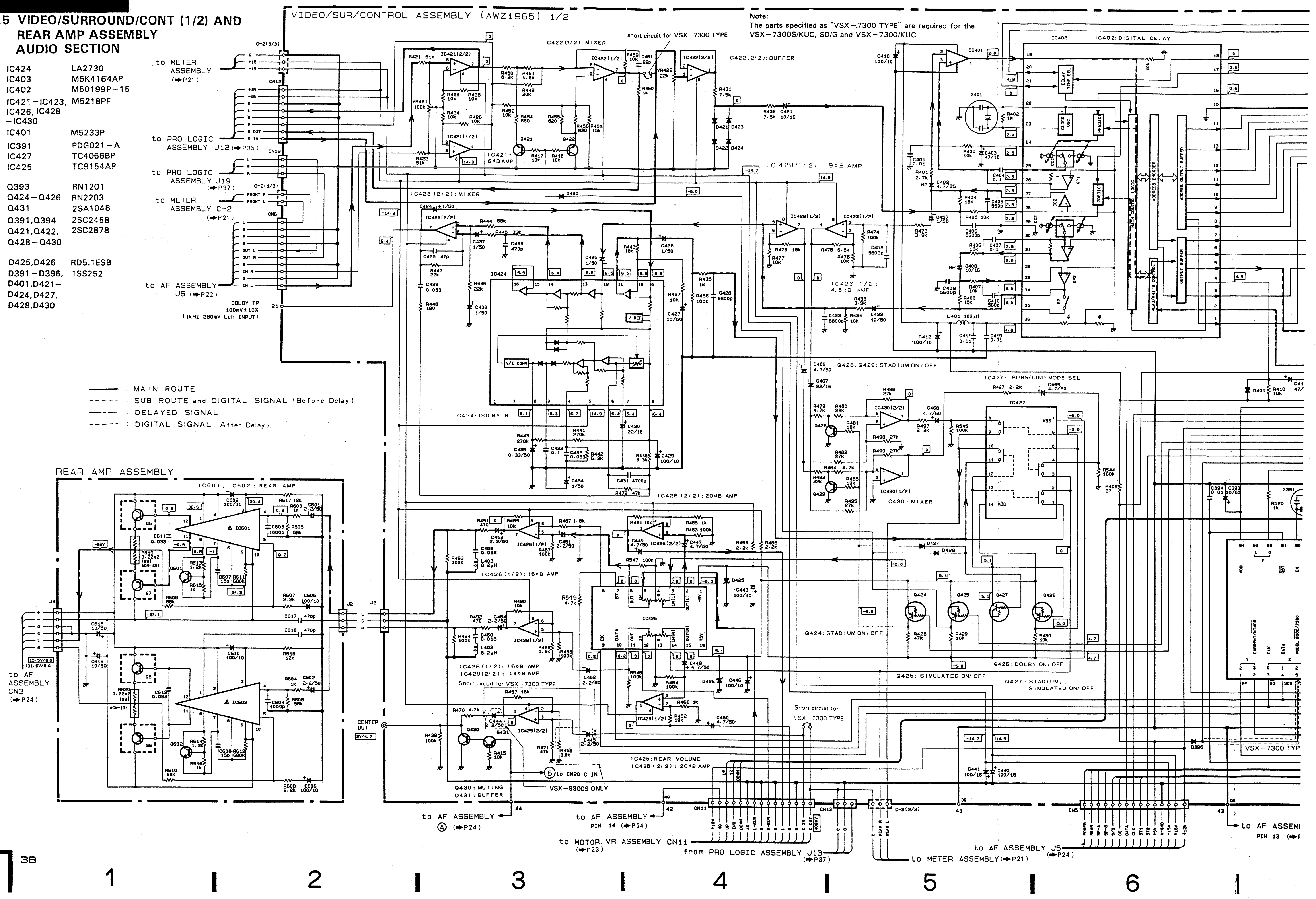

4
5
6
7
8
9
A
B
C
D
IC1129: TEST TONE MODE
Q1120–Q1122: CNETER MODE CONTROL
Q1123, Q1124: SURROUND MODE CONTROL
IC1130: SURROUND CONTROL
IC1105(2/2): INVER BUFFER
IC1125(1/2): INVERTER BUFFER
V.C.A
COMBINING NETWORK
DUAL TIME-CONSTANT
POLARITY SPLITTER
SHRESHOLD SWITCH
CENTER MODE CONTROL
IC1126(2/2): INVERTER BUFFER
IC1131: SURROUND MODE SWITCH
IC1126(1/2): INVERTER BUFFER
TP.L
TP.C
TP.R
TP.S
WIDE
NORMAL
PHANTOM
S OUT
S IN
DOLBY
J20
ST1
DATA
CLK
D.G.
P2
ST2
MUTE
J19
J13
DOLBY LEVEL (260mV) 150mV/470Ω
IN-PHASE L+R 106mV INPUT (260mV) 400mV/470Ω
to VIDEO/SUR/CONTROL ASSEMBLY CN20 (➡P40)
to VIDEO/SUR/CONTROL ASSEMBLY CN19 (➡P38)
to VIDEO/SUR/CONTROL ASSEMBLY CN13 (➡P39)

IC1123,IC1131	**BU4066BL**
IC1130	**CXD1067P**
IC1102–IC1105,IC1107–IC1109, IC1112,IC1117–IC1122,IC1124– IC1126,IC1128	**M5218PF**
IC1113–IC1116	**M5222L**
IC1106,IC1111	**NJM082D**
IC1127	**TC4011UBP**
IC1129	**TC4052BP**
IC1101,IC1110	**TC4066BP**
IC1132	**TC9154AP**
Q1120–Q1122,Q1127	**RN1203**
Q1119,Q1124,Q1125	**RN2203**
Q1101–Q1106,Q1110–Q1115, Q1123,Q1126	**2SA1048**
Q1108,Q1117	**2SC2259**
Q1109,Q1118	**2SC2458**
Q1107,Q1116	**2SJ74**
D1113,D1114	**RD10ESB2**
D1119	**RD5.1ESB**
D1115	**RD5.6ESB**
D1101–D1112,D1116–D1118	**1SS252**

5.5 VIDEO/SURROUND/CONT (1/2) AND REAR AMP ASSEMBLY AUDIO SECTION

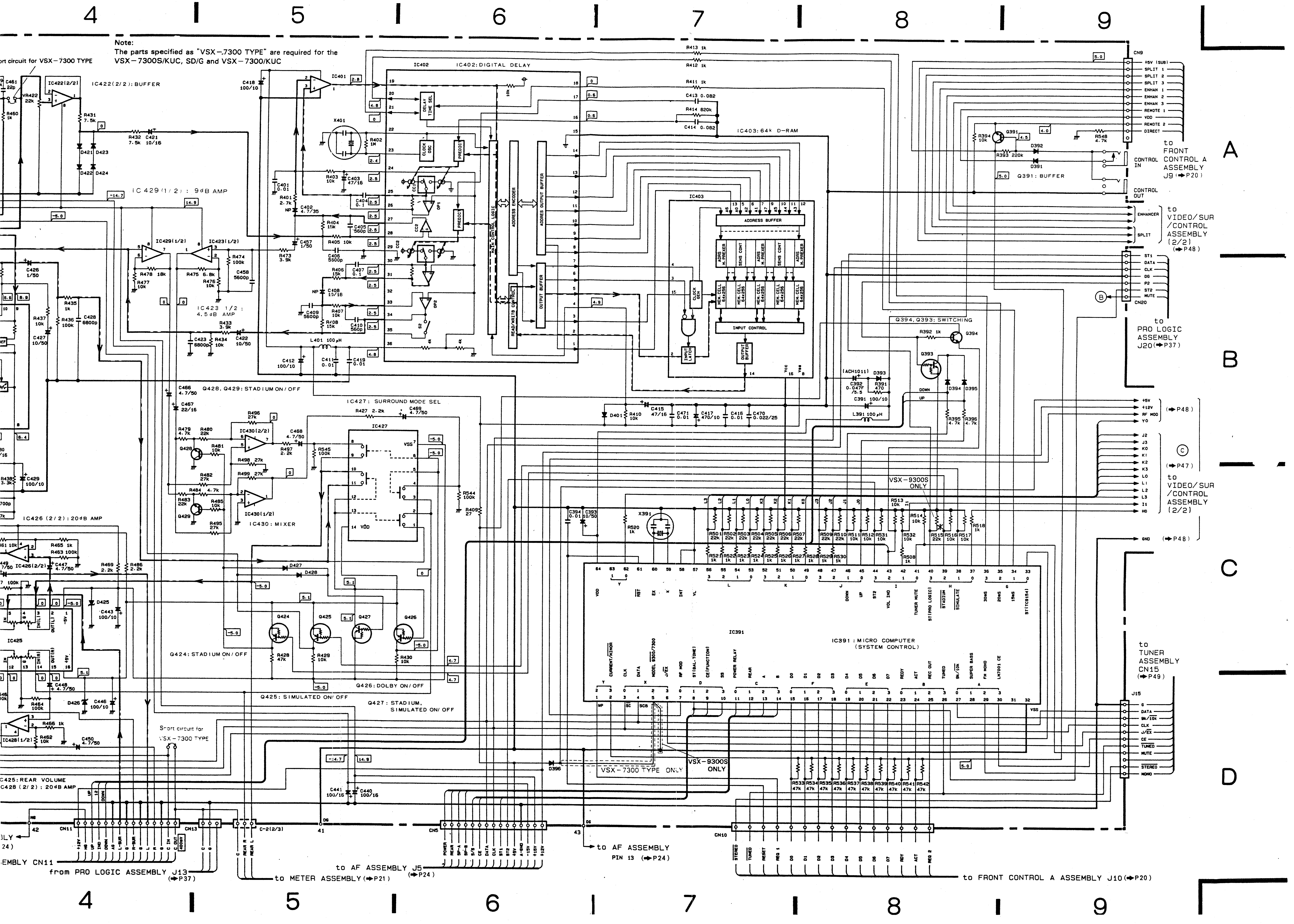
IC424	LA2730
IC403	M5K4164AP
IC402	M50199P−15
IC421−IC423, IC426, IC428 −IC430	M5218PF
IC401	M5233P
IC391	PDG021−A
IC427	TC4066BP
IC425	TC9154AP
Q393	RN1201
Q424−Q426	RN2203
Q431	2SA1048
Q391,Q394	2SC2458
Q421,Q422, Q428−Q430	2SC2878
D425,D426	RD5.1ESB
D391−D396, D401,D421−D424,D427, D428,D430	1SS252

Note:
The parts specified as "VSX−7300 TYPE" are required for the VSX−7300S/KUC, SD/G and VSX−7300/KUC


1
2
3
4
5
6
A
B
C
D
VIDEO/SUR/CONTROL ASSEMBLY (AWZ1965) 1/2
REAR AMP ASSEMBLY
to METER ASSEMBLY (➡P21)
to PRO LOGIC ASSEMBLY J12 (➡P35)
to PRO LOGIC ASSEMBLY J19 (➡P37)
to METER ASSEMBLY C−2 (➡P21)
to AF ASSEMBLY J6 (➡P22)
DOLBY TP 100mV±10% (1kHz 260mV Lch INPUT)
C−2(3/3)
CN12
CN19
C−2(1/3)
CN6
IC422(1/2): MIXER
short circuit for VSX−7300 TYPE
IC422(2/2): BUFFER
IC421: 6dB AMP
IC423(2/2): MIXER
IC424: DOLBY B
IC429(1/2): 9dB AMP
IC423(1/2): 4.5dB AMP
IC402: DIGITAL DELAY
DELAY TIME SEL
CLOCK OSC
PREDIC
MAIN CONTROL LOGIC
ADDRESS ENCODER
ADDRESS OUTPUT BUFFER
READ/WRITE CONTROL
OUTPUT BUFFER
Q428, Q429: STADIUM ON/OFF
IC427: SURROUND MODE SEL
IC430: MIXER
IC426(2/2): 20dB AMP
IC426(1/2): 16dB AMP
IC428(1/2): 16dB AMP
IC429(2/2): 14dB AMP
Short circuit for VSX−7300 TYPE
IC425: REAR VOLUME
IC428(2/2): 20dB AMP
Q430: MUTING
Q431: BUFFER
VSX−9300S ONLY
to CN20 C IN
CENTER OUT
Q424: STADIUM ON/OFF
Q425: SIMULATED ON/OFF
Q426: DOLBY ON/OFF
Q427: STADIUM, SIMULATED ON/OFF
IC601, IC602: REAR AMP
to AF ASSEMBLY CN3 (➡P24)
to AF ASSEMBLY Ⓐ (➡P24)
to AF ASSEMBLY PIN 14 (➡P24)
to MOTOR VR ASSEMBLY CN11 (➡P23)
from PRO LOGIC ASSEMBLY J13 (➡P37)
to METER ASSEMBLY (➡P21)
to AF ASSEMBLY J5 (➡P24)
to AF ASSEMBLY PIN 13
VSX−7300 TYPE
CN11
CN13
C−2(2/3)
CN5
J2
J3
X401
X391

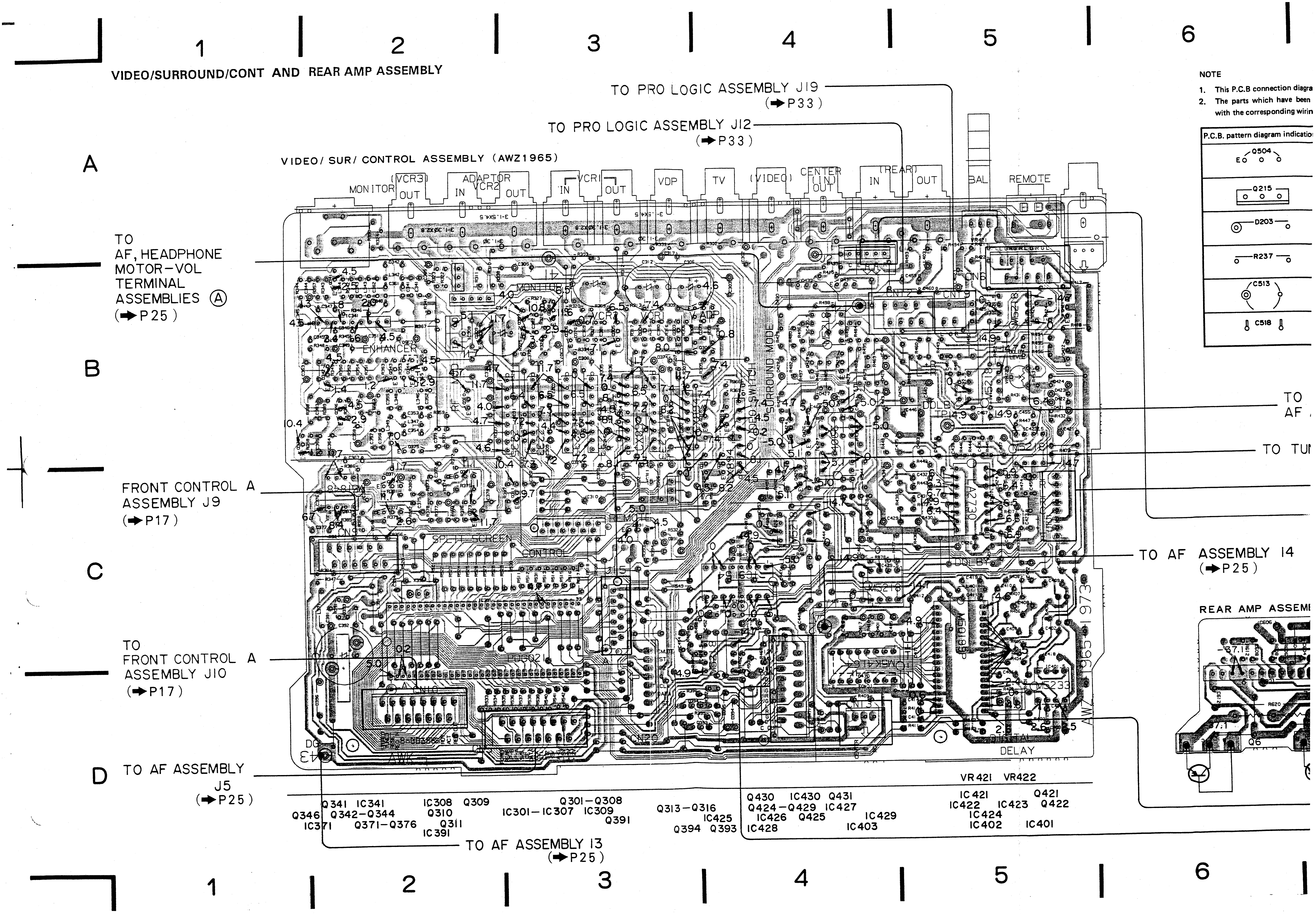
──── : MAIN ROUTE
- - - - - : SUB ROUTE and DIGITAL SIGNAL (Before Delay)
—·—·— : DELAYED SIGNAL
-·-·-·- : DIGITAL SIGNAL After Delay)

Note:
The parts specified as "VSX-.7300 TYPE" are required for the VSX-7300S/KUC, SD/G and VSX-7300/KUC



4
5
6
7
8
9
A
B
C
D
Short circuit for VSX-7300 TYPE
IC422(2/2): BUFFER
IC402: DIGITAL DELAY
IC403: 64k D-RAM
IC429(1/2): 9dB AMP
IC423 1/2: 4.5dB AMP
Q428, Q429: STADIUM ON/OFF
IC427: SURROUND MODE SEL
IC430: MIXER
IC426 (2/2): 20dB AMP
Q424: STADIUM ON/OFF
Q425: SIMULATED ON/OFF
Q426: DOLBY ON/OFF
Q427: STADIUM, SIMULATED ON/OFF
IC425: REAR VOLUME
IC428 (2/2): 20dB AMP
Q391: BUFFER
Q394, Q393: SWITCHING
IC391: MICRO COMPUTER (SYSTEM CONTROL)
VSX-9300S ONLY
VSX-7300 TYPE ONLY
DELAY TIME SEL
CLOCK OSC
PREDIC
ADDRESS ENCODER
ADDRES OUTPUT BUFFER
OUTPUT BUFFER
READ/WRITE CONTROL
MAIN CONTROL LOGIC
ADDRESS BUFFER
INPUT CONTROL
CLOCK GEN
INPUT LATCH
OUTPUT BUFFER
CN9
CONTROL IN
CONTROL OUT
to FRONT CONTROL A ASSEMBLY J9 (➡P20)
to VIDEO/SUR /CONTROL ASSEMBLY (2/2) (➡P48)
CN20
to PRO LOGIC ASSEMBLY J20 (➡P37)
(➡P48)
(➡P47)
to VIDEO/SUR /CONTROL ASSEMBLY (2/2)
(➡P48)
to TUNER ASSEMBLY CN15 (➡P49)
J15
CN11
CN13
CN5
CN10
ASSEMBLY CN11
from PRO LOGIC ASSEMBLY J13 (➡P37)
to METER ASSEMBLY (➡P21)
to AF ASSEMBLY J5 (➡P24)
to AF ASSEMBLY PIN 13 (➡P24)
to FRONT CONTROL A ASSEMBLY J10 (➡P20)
Short circuit for VSX-7300 TYPE

VIDEO/SURROUND/CONT AND REAR AMP ASSEMBLY


1
2
3
4
5
6
A
B
C
D
TO PRO LOGIC ASSEMBLY J19
(➡P33)
TO PRO LOGIC ASSEMBLY J12
(➡P33)
VIDEO/ SUR/ CONTROL ASSEMBLY (AWZ1965)
MONITOR
(VCR3)
OUT
ADAPTOR
IN
VCR2
OUT
VCR1
IN
OUT
VDP
TV
(VIDEO)
CENTER
(IN)
OUT
(REAR)
IN
OUT
BAL
REMOTE
TO
AF, HEADPHONE
MOTOR-VOL
TERMINAL
ASSEMBLIES Ⓐ
(➡P25)
ENHANCER
MONITOR
SURROUND MODE
SWITCH
DOLBY
SPLIT SCREEN
CONTROL
REMOTE
DIGITAL
DELAY
AWZ1965-1973
FRONT CONTROL A
ASSEMBLY J9
(➡P17)
TO
FRONT CONTROL A
ASSEMBLY J10
(➡P17)
TO AF ASSEMBLY
J5
(➡P25)
TO
AF
TO TU
TO AF ASSEMBLY 14
(➡P25)
REAR AMP ASSEMB
R620
Q6
VR421 VR422
Q341 IC341
Q346 Q342–Q344
IC371 Q371–Q376
IC308 Q309
Q310
Q311
IC391
IC301–IC307 IC309
Q301–Q308
Q391
Q313–Q316
IC425
Q394 Q393
Q430 IC430 Q431
Q424–Q429 IC427
IC426 Q425
IC428
IC429
IC403
IC421
IC422 IC423
IC424
IC402
Q421
Q422
IC401
TO AF ASSEMBLY 13
(➡P25)
1
2
3
4
5
6

NOTE

1. This P.C.B connection diagra
2. The parts which have been
with the corresponding wirin

P.C.B. pattern diagram indicatio

Q504
E

Q215

D203

R237

C513

C518

NOTE

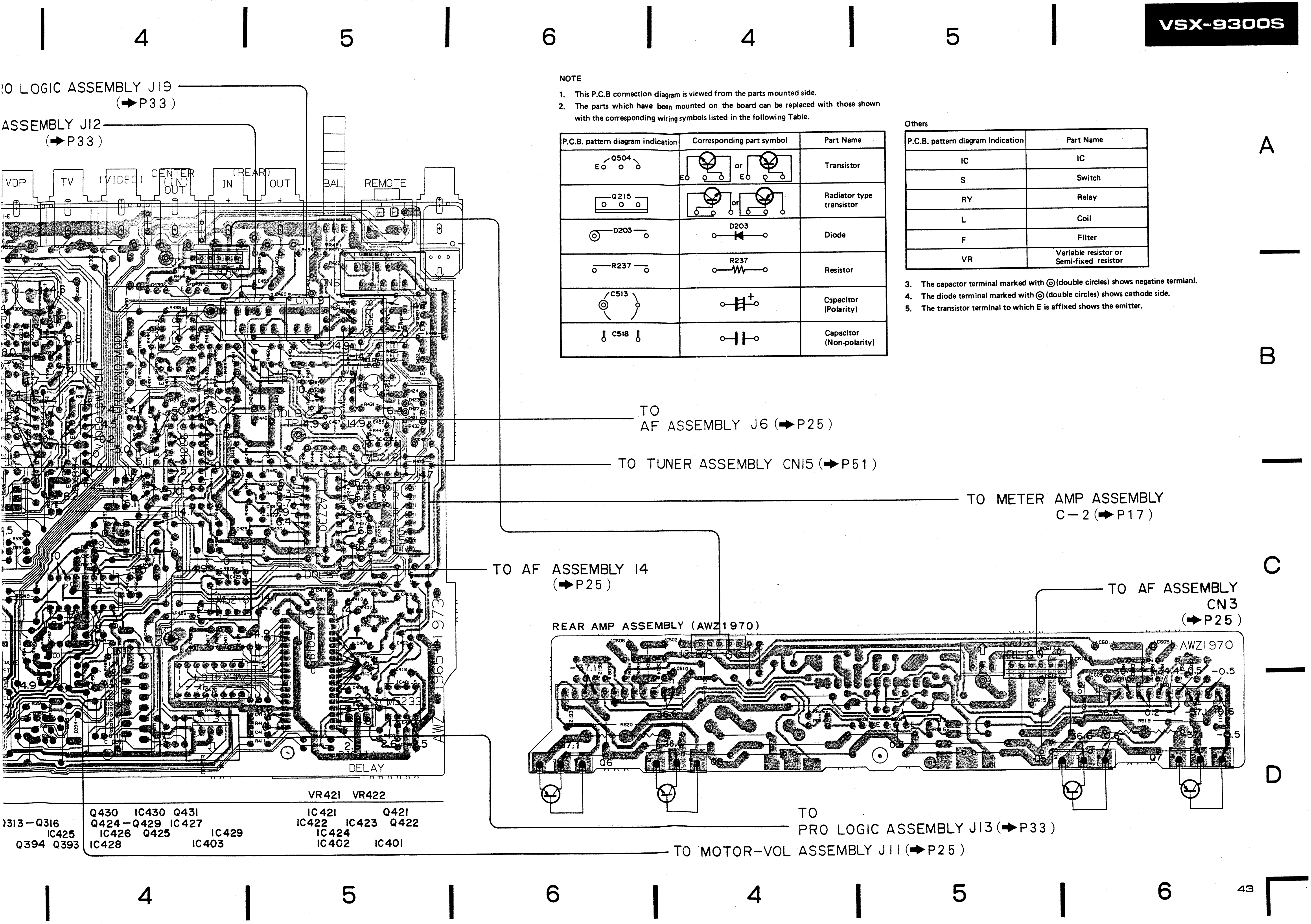
1. This P.C.B connection diagram is viewed from the parts mounted side.
2. The parts which have been mounted on the board can be replaced with those shown with the corresponding wiring symbols listed in the following Table.

P.C.B. pattern diagram indication	Corresponding part symbol	Part Name
E Q504	E or E	Transistor
Q215	or	Radiator type transistor
D203	D203	Diode
R237	R237	Resistor
C513	+	Capacitor (Polarity)
C518		Capacitor (Non-polarity)

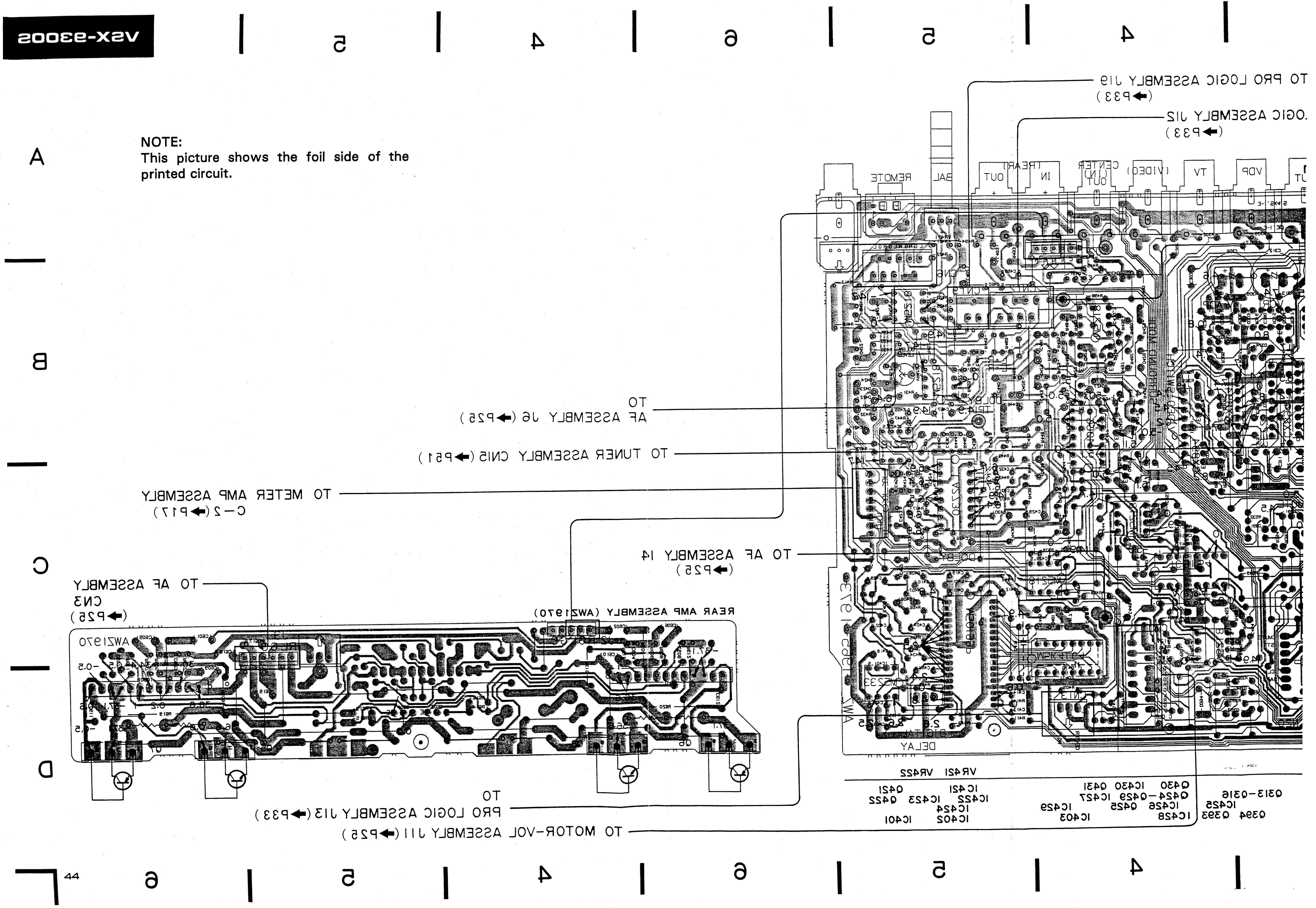
Others

P.C.B. pattern diagram indication	Part Name
IC	IC
S	Switch
RY	Relay
L	Coil
F	Filter
VR	Variable resistor or Semi-fixed resistor

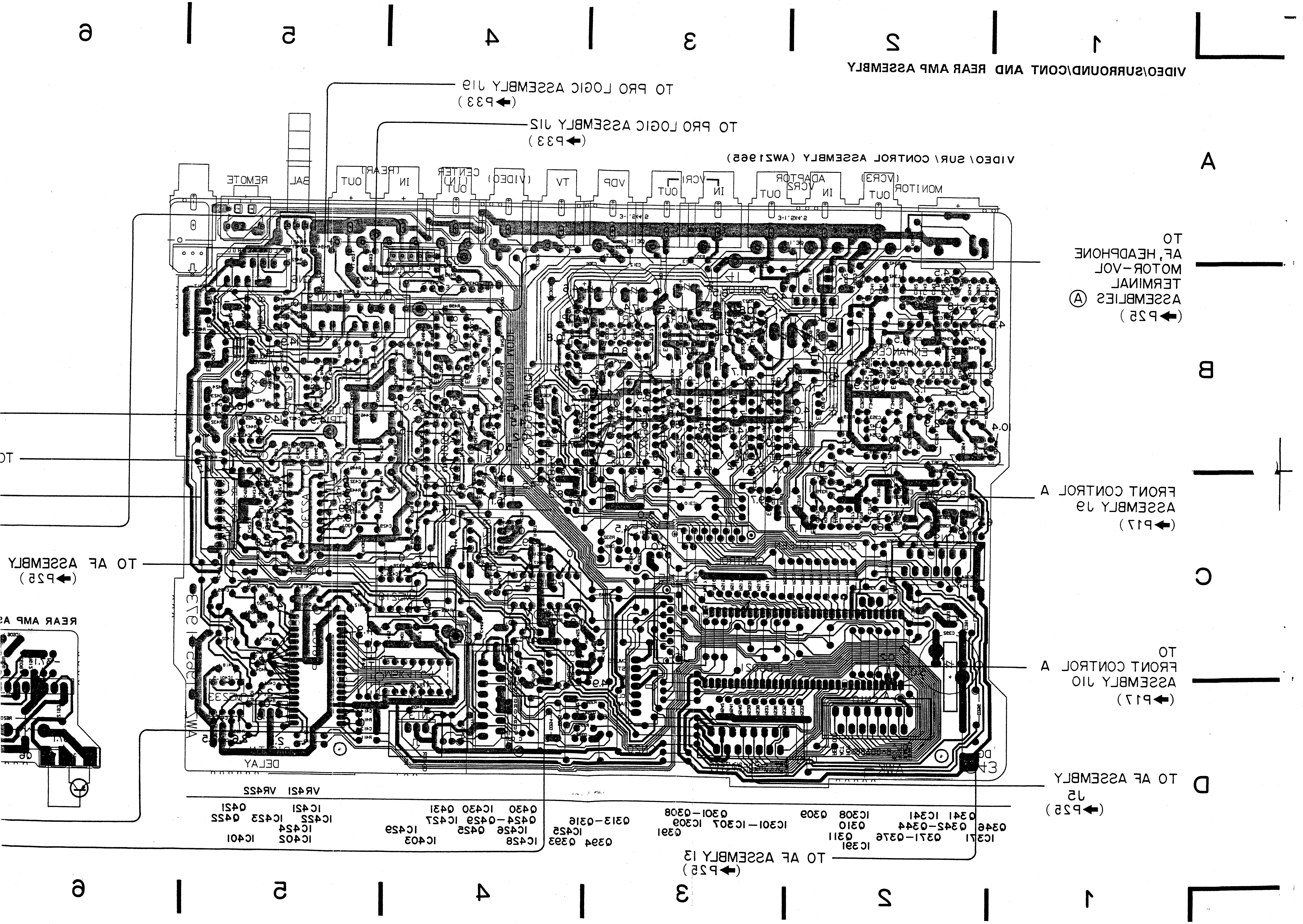
3. The capactor terminal marked with ◎(double circles) shows negatine termianl.
4. The diode terminal marked with ◎(double circles) shows cathode side.
5. The transistor terminal to which E is affixed shows the emitter.


4
5
6
4
5
6
A
B
C
D
O LOGIC ASSEMBLY J19 (➡P33)
ASSEMBLY J12 (➡P33)
VDP
TV
(VIDEO)
CENTER (IN) OUT
(REAR) IN OUT
BAL
REMOTE
SURROUND MODE
VIDEO SWITCH
DOLBY
DOLBY LEVEL
DELAY
TO AF ASSEMBLY J6 (➡P25)
TO TUNER ASSEMBLY CN15 (➡P51)
TO METER AMP ASSEMBLY C−2 (➡P17)
TO AF ASSEMBLY I4 (➡P25)
TO AF ASSEMBLY CN3 (➡P25)
REAR AMP ASSEMBLY (AWZ1970)
AWZ1970
AWZ1965+1973
Q6
Q8
Q5
Q7
TO PRO LOGIC ASSEMBLY J13 (➡P33)
TO MOTOR-VOL ASSEMBLY J11 (➡P25)
Q313−Q316
IC425
Q394 Q393
Q430 IC430 Q431
Q424−Q429 IC427
IC426 Q425
IC428
IC429
IC403
VR421 VR422
IC421 Q421
IC422 IC423 Q422
IC424
IC402 IC401

NOTE:
This picture shows the foil side of the printed circuit.

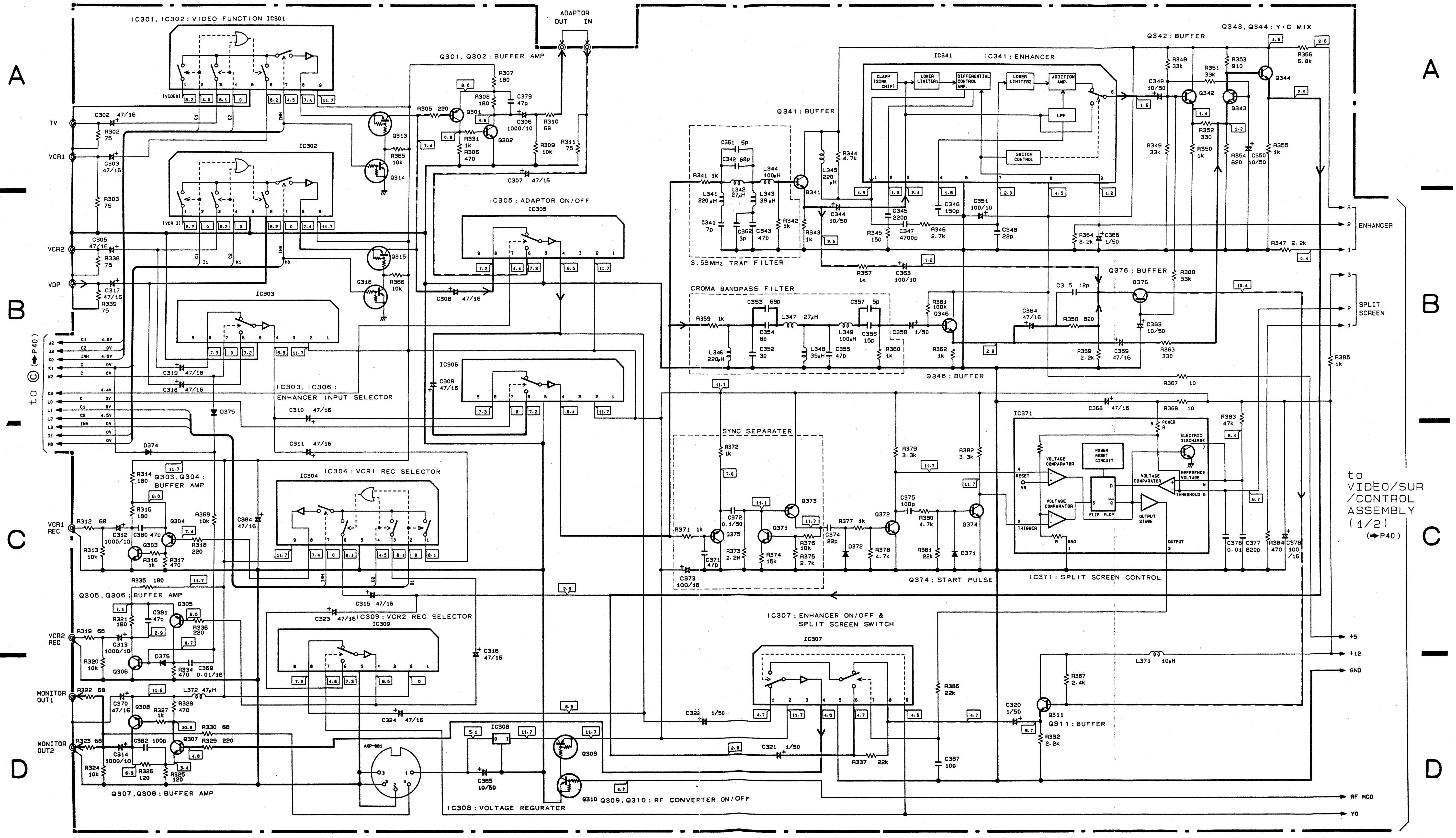

5
4
6
5
4
A
B
C
D
6
5
4
6
5
4
TO PRO LOGIC ASSEMBLY J19 (➡P33)
TO PRO LOGIC ASSEMBLY J12 (➡P33)
REMOTE
BAL
(REAR) OUT
IN
CENTER (IN) OUT
(VIDEO)
TV
VDP
TO AF ASSEMBLY J6 (➡P25)
TO TUNER ASSEMBLY CN15 (➡P51)
TO METER AMP ASSEMBLY C-2 (➡P17)
TO AF ASSEMBLY J4 (➡P25)
TO AF ASSEMBLY CN3 (➡P25)
REAR AMP ASSEMBLY (AWZ1970)
AWZ1970
DELAY
DIGITAL
VR422 VR421
Q421 IC421
Q422 IC423 IC422
IC424
IC401 IC402
Q430 IC430 Q431
Q424-Q429 IC427
IC426 Q425
IC428 IC403 IC429
Q313-Q316
IC425
Q394 Q393
TO PRO LOGIC ASSEMBLY J13 (➡P33)
TO MOTOR-VOL ASSEMBLY J11 (➡P25)

VIDEO/SURROUND/CONT AND REAR AMP ASSEMBLY


1
2
3
4
5
6
A
B
C
D
TO PRO LOGIC ASSEMBLY J19 (→P33)
TO PRO LOGIC ASSEMBLY J12 (→P33)
VIDEO/ SUR/ CONTROL ASSEMBLY (AWZ1965)
REMOTE
BAL
(REAR) OUT IN
CENTER (IN) OUT
(VIDEO)
TV
VDP
VCR1 OUT IN
ADAPTOR VCR2 OUT IN
(VCR3) OUT
MONITOR
TO AF, HEADPHONE MOTOR-VOL TERMINAL ASSEMBLIES Ⓐ (→P25)
FRONT CONTROL A ASSEMBLY J9 (→P17)
TO FRONT CONTROL A ASSEMBLY J10 (→P17)
TO AF ASSEMBLY J5 (→P25)
TO AF ASSEMBLY J3 (→P25)
TO AF ASSEMBLY (→P25)
TO
REAR AMP AS
ENHANCER
CONTROL
DELAY
VR421 VR422
Q341 IC341
Q342-Q344 Q346
IC371 Q371-Q376
IC308 Q309
Q310
Q311
IC391
Q301-Q308
IC301-IC307 IC309
Q391
Q313-Q316
IC425
Q393 Q394
Q430 IC430 Q431
Q424-Q429 IC427
IC426 Q425
IC428
IC429
IC403
IC421 Q421
IC422 IC423 Q422
IC424
IC401 IC402

VIDEO/SURROUND/CONT (2/2) VIDEO SECTION

VIDEO/SUR/CONTROL ASSEMBLY (AWZ1965) 2/2


1
2
3
4
5
6
A
B
C
D
IC301, IC302 : VIDEO FUNCTION IC301
IC302
IC303
IC303, IC306 : ENHANCER INPUT SELECTOR
IC304 : VCR1 REC SELECTOR
IC305 : ADAPTOR ON/OFF
IC306
IC309 : VCR2 REC SELECTOR
IC308 : VOLTAGE REGURATER
IC307 : ENHANCER ON/OFF & SPLIT SCREEN SWITCH
IC341 : ENHANCER
CLAMP (SINK CHIP)
LOWER LIMITER1
DIFFERENTIAL CONTROL AMP.
LOWER LIMITER2
ADDITION AMP.
LPF
SWITCH CONTROL
IC371 : SPLIT SCREEN CONTROL
POWER RESET CIRCUIT
VOLTAGE COMPARATOR
FLIP FLOP
OUTPUT STAGE
ELECTRIC DISCHARGE
REFERENCE VOLTAGE
THRESHOLD
TRIGGER
RESET
ADAPTOR OUT IN
Q301, Q302 : BUFFER AMP
Q303, Q304 : BUFFER AMP
Q305, Q306 : BUFFER AMP
Q307, Q308 : BUFFER AMP
Q309, Q310 : RF CONVERTER ON/OFF
Q311 : BUFFER
Q341 : BUFFER
Q342 : BUFFER
Q343, Q344 : Y·C MIX
Q346 : BUFFER
Q374 : START PULSE
Q376 : BUFFER
3.58MHz TRAP FILTER
CROMA BANDPASS FILTER
SYNC SEPARATER
AKP-081
TV
VCR1
VCR2
VDP
VCR1 REC
VCR2 REC
MONITOR OUT1
MONITOR OUT2
to Ⓒ (➡P40)
ENHANCER
SPLIT SCREEN
to VIDEO/SUR /CONTROL ASSEMBLY (1/2) (➡P40)
+5
+12
GND
RF MOD
YO

IC301,IC302, CX-894
IC304

IC371 M51848P
IC341 NJM2209S

IC303,IC305, NJM2233BS
IC306,IC309

IC307 NJM2235S
IC308 μPC78L05

Q310,Q313– RN1203
Q316

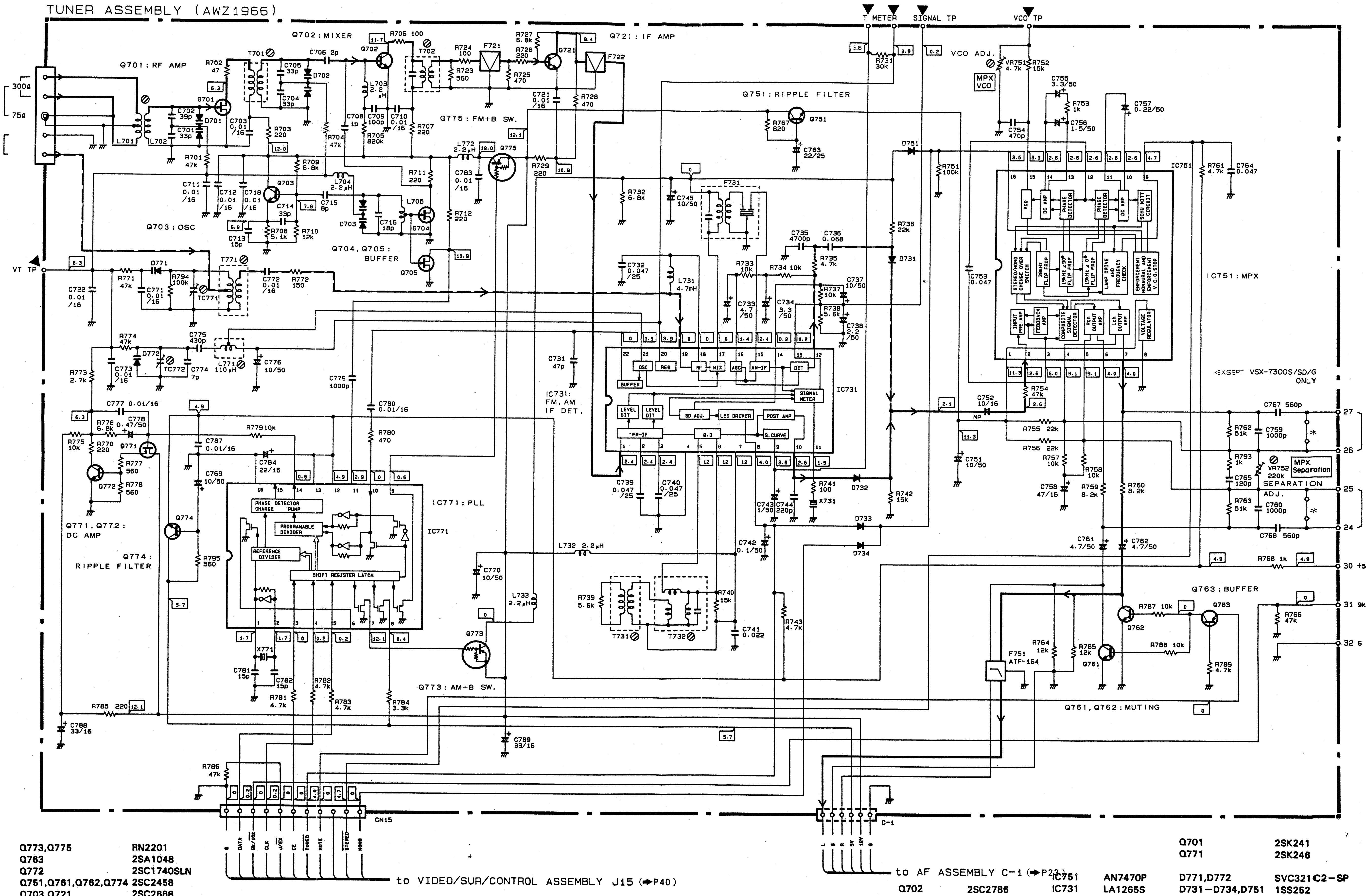
D371,D372, 1SS252
D374-D376

Q309 RN2201
Q301,Q304,Q305, 2SA1048
Q308,Q373,Q375

Q302,Q303,Q306,Q307,Q311, 2SC2458
Q341–Q344,Q346,Q371,Q372,
Q374,Q376

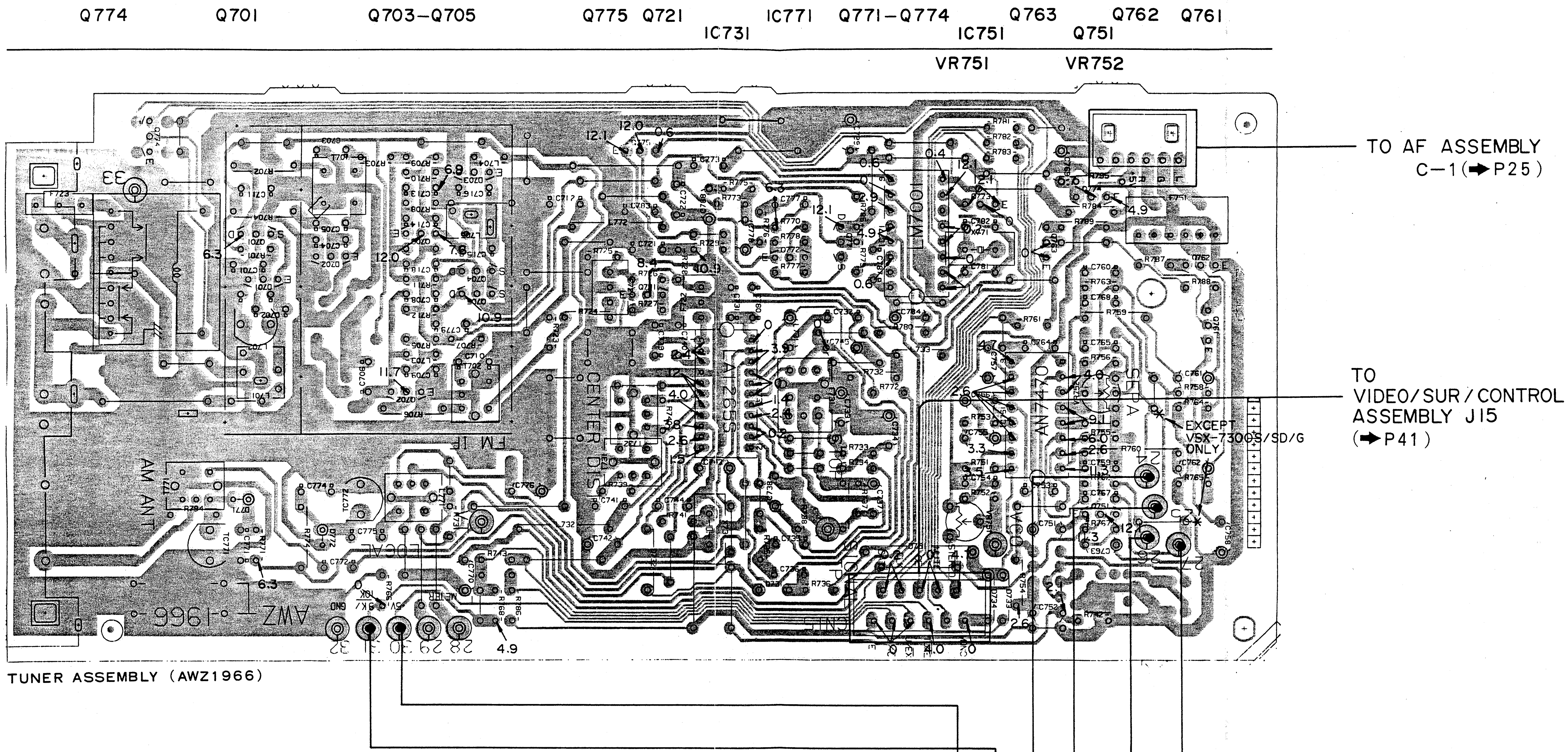
5.6 TUNER ASSEMBLY

TUNER ASSEMBLY (AWZ1966)

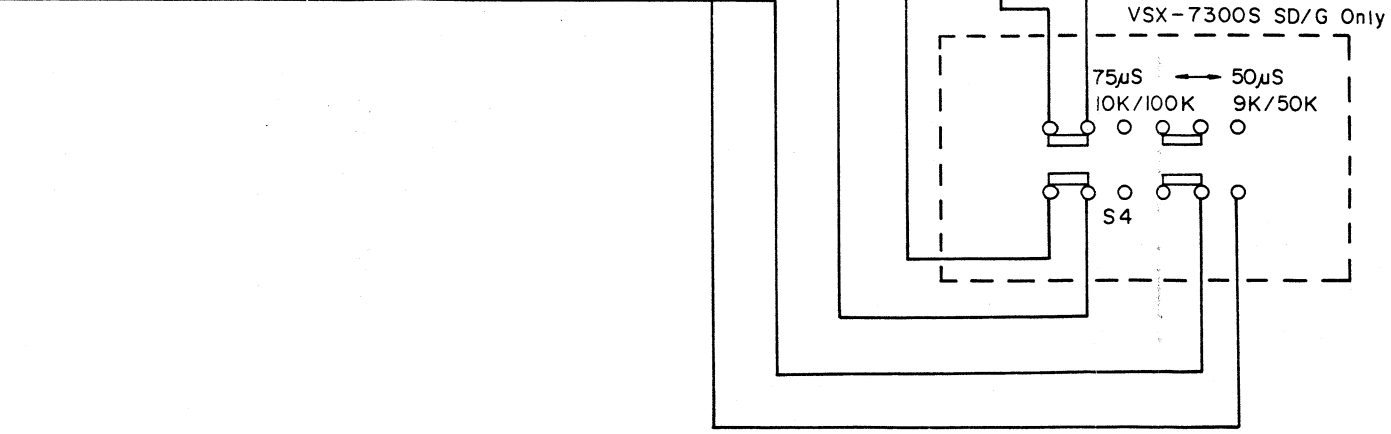

1
2
3
4
5
6
A
B
C
D
Q701 : RF AMP
Q702 : MIXER
Q721 : IF AMP
Q775 : FM+B SW.
Q703 : OSC
Q704, Q705 : BUFFER
Q751 : RIPPLE FILTER
T METER
SIGNAL TP
VCO TP
VCO ADJ.
MPX VCO
IC751 : MPX
IC731 : FM, AM IF DET.
IC771 : PLL
Q771, Q772 : DC AMP
Q774 : RIPPLE FILTER
Q773 : AM+B SW.
Q763 : BUFFER
Q761, Q762 : MUTING
VT TP
FM 300Ω
75Ω
AM
F721
F722
F731
F751 ATF-164
T701
T702
T731
T732
T771
X731
X771
L701
L702
L703
L704
L705
L731 4.7mH
L732 2.2μH
L733 2.2μH
L771 110μH
L772 2.2μH
VR751 4.7k
VR752 220k
MPX Separation
SEPARATION ADJ.
*EXCEPT VSX-7300S/SD/G ONLY
PHASE DETECTOR CHARGE PUMP
PROGRAMABLE DIVIDER
REFERENCE DIVIDER
SHIFT REGISTER LATCH
OSC
REG
RF
MIX
AGC
AM-IF
DET
BUFFER
SIGNAL METER
LEVEL DIT
SD ADJ.
LED DRIVER
POST AMP
FM-IF
Q.D
S.CURVE
VCO
DC AMP
PHASE DETECTOR
SCHMITT CIRCUIT
STEREO/MONO CHANGE OVER SWITCH
38kHz FLIP FLOP
19kHz ∠90° FLIP FLOP
19kHz ∠0° FLIP FLOP
LAMP DRIVE AND FREQUENCY CHECK
ENFORCEMENT MONAURAL AND ENFORCEMENT V.C.O.STOP
INPUT PRE AMP
FEEDBACK AMP
COMPOSITE SIGNAL DETECTOR
Rch OUTPUT AMP
Lch OUTPUT AMP
VOLTAGE REGULATOR
27
26
L
25
24
R
30 +5V
31 9k/10k
32 G
CN15
C-1
G
DATA
9k/10k
CLK
J/EX
CE
TUNED
MUTE
STEREO
MONO
L
G
R
5V
12V
G
to VIDEO/SUR/CONTROL ASSEMBLY J15 (➡P40)
to AF ASSEMBLY C-1 (➡P23)

Q773,Q775	RN2201
Q763	2SA1048
Q772	2SC1740SLN
Q751,Q761,Q762,Q774	2SC2458
Q703,Q721	2SC2668
Q702	2SC2786
Q704,Q705	2SK161
IC751	AN7470P
IC731	LA1265S
IC771	LM7001
Q701	2SK241
Q771	2SK246
D771,D772	SVC321C2-SP
D731-D734,D751	1SS252
D701-D703	1SV147

TUNER ASSEMBLY


Q774
Q701
Q703–Q705
Q775 Q721
IC731
IC771
Q771–Q774
IC751
Q763
Q762
Q761
Q751
VR751
VR752
A
B
C
D
TO AF ASSEMBLY
C-1 (➔P25)
TO
VIDEO/SUR/CONTROL
ASSEMBLY J15
(➔P41)
EXCEPT
VSX-7300S/SD/G
ONLY
AM ANT
FM IF
CENTER
AN7470
AWZ-1966
GND
5V
METER
LOCAL
STEREO
4.9
6.3
12.0
12.1
0.6
8.4
10.9
3.9
4.0
1.4
2.6
3.3
11.7
6.8
7.8
10.8

TUNER ASSEMBLY (AWZ1966)


VSX-7300S SD/G Only
75μS ⟵ 50μS
10K/100K 9K/50K
S4

NOTE

1. This P.C.B connection diagram is viewed from the parts mounted side.
2. The parts which have been mounted on the board can be replaced with those shown with the corresponding wiring symbols listed in the following Table.

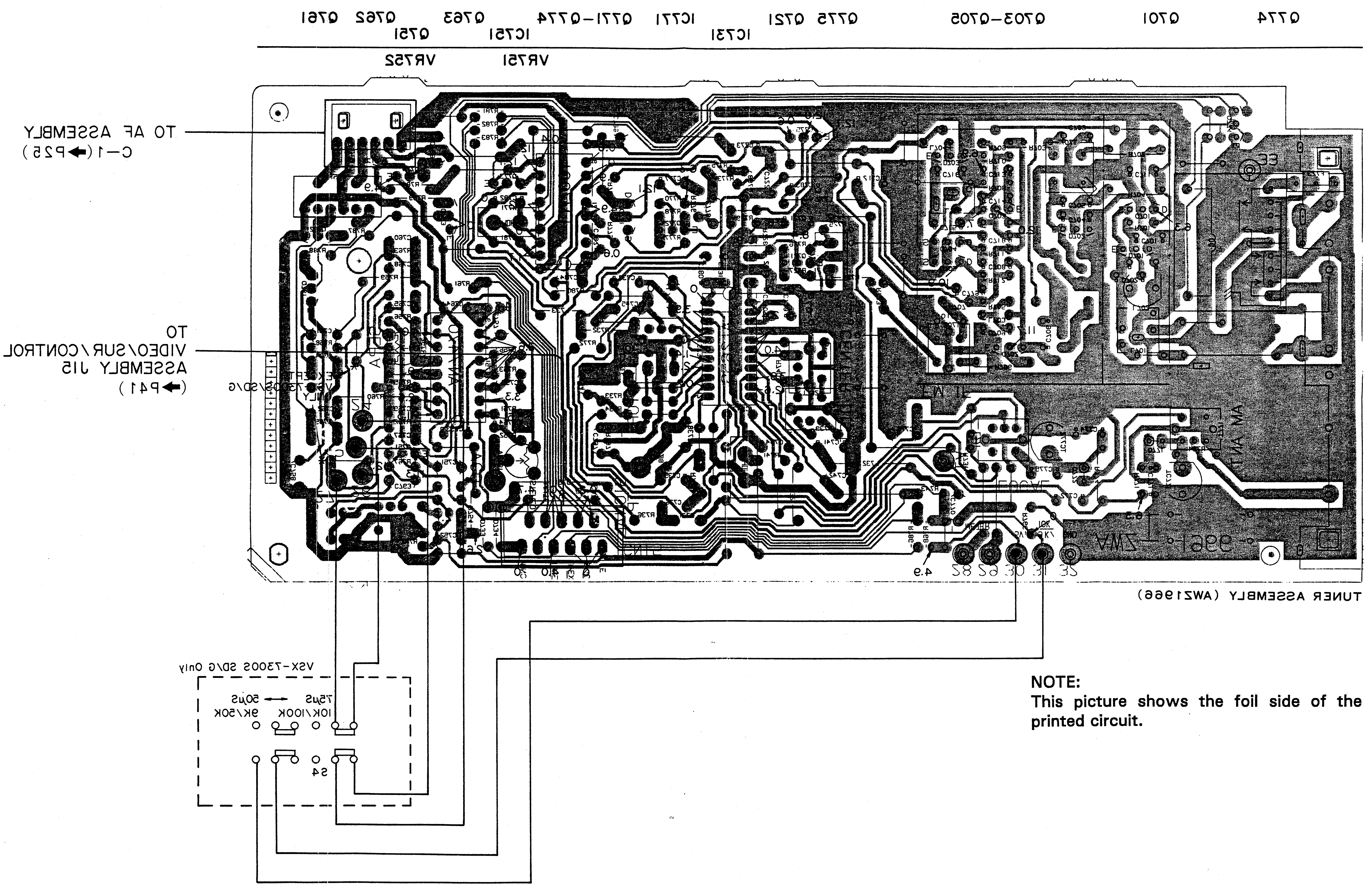
P.C.B. pattern diagram indication	Corresponding part symbol	Part Name
E Q504	E or E	Transistor
Q215	or	Radiator type transistor
D203	D203	Diode
R237	R237	Resistor
C513	+	Capacitor (Polarity)
C518		Capacitor (Non-polarity)

Others

P.C.B. pattern diagram indication	Part Name
IC	IC
S	Switch
RY	Relay
L	Coil
F	Filter
VR	Variable resistor or Semi-fixed resistor

3. The capactor terminal marked with ◎ (double circles) shows negatine termianl.
4. The diode terminal marked with ◎ (double circles) shows cathode side.
5. The transistor terminal to which E is affixed shows the emitter.

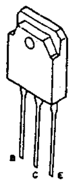
TUNER ASSEMBLY


Q774
Q701
Q703–Q705
Q721 Q775
IC731
IC771
Q771–Q774
IC751
Q763
Q751
Q762 Q761
VR751
VR752
TO AF ASSEMBLY
C-1 (→P25)
TO
VIDEO/SUR/CONTROL
ASSEMBLY J15
(→P41)
TUNER ASSEMBLY (AWZ1966)
VSX-7300S SD/G Only
75µs ←→ 50µs
10K/100K 9K/50K
S4

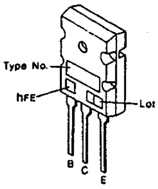
NOTE:
This picture shows the foil side of the printed circuit.

External Appearance of Transistors and ICs

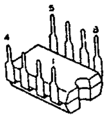
2SA1263N



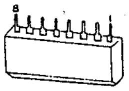
2SA1302


Type No.
hFE
Lot No.
B
C
E

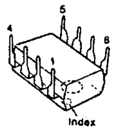
M5218PF
M5220P
M51848P
M5233P



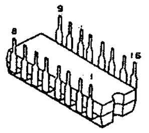
M5222L
M5220L
M5218LF



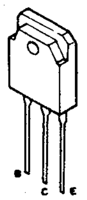
NJM082D



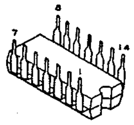
TC4052BP
TC9154AP
AN7470P
TC9184P
TC4011UBP



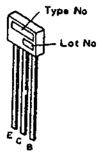
2SC3180N



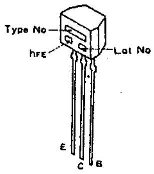
BU4066BL
TC4066BP
PA0016
LA2730



RN1203
RN2203
RN1201
RN2201


Type No
Lot No
E
C
B

2SA1048
2SC2458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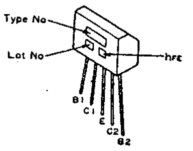
Lot No
E
C
B

2SC2259
2SA979


Type No
Lot No
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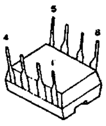
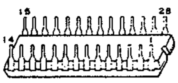
B1
C1
E
C2
B2

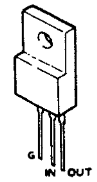
M5201P



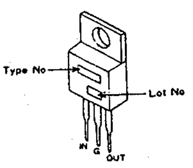
TC9162N
TC9164N
PDG021



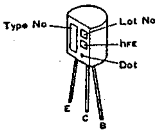
NJM79M15A



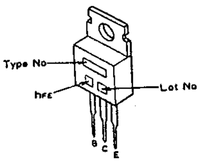
μPC78M05H
μPC78M15H


Type No
Lot No
IN
G
OUT

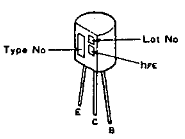
2SA1145P


Type No
Lot No
hFE
Dot
E
C
B

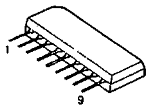
2SA968
2SC2238


Type No
hFE
Lot No
B
C
E

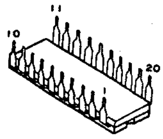
2SC2240
2SC2705P
2SC2878


Type No
Lot No
hFE
E
C
B

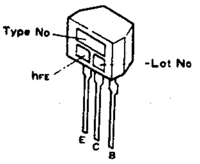
CX-894
TA7291S
NJM2209S
NJM2233AS
NJM2235S



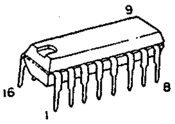
CXD1067
CXD1067P



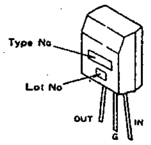
2SC1740SLN


Type No
hFE
Lot No
E
C
B

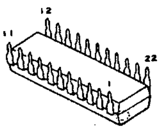
M5K4164AP



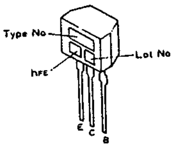
μPC78L05


Type No
Lot No
OUT
G
IN

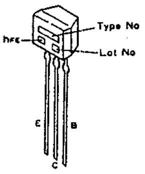
LA1265S



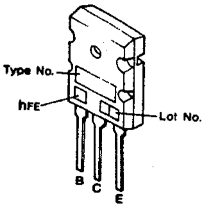
2SC2668


Type No
hFE
Lot No
E
C
B

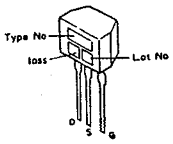
2SC2786


Type No
hFE
Lot No
E
B
C

2SC3281


Type No.
hFE
Lot No.
B
C
E

2SK161
2SK241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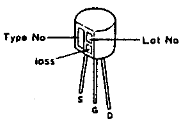
Idss
Lot No
D
S
G

2SK246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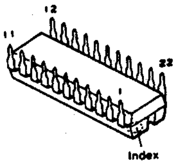
Idss
Lot No
S
G
D

M50199P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11
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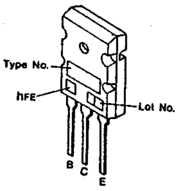
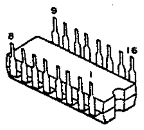
1
Index

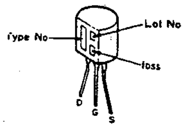
2SC2181


Type No.
hFE
Lot No.
B
C
E

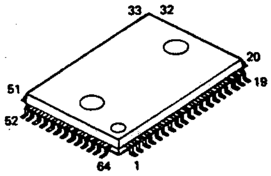
TC9154AP



2SJ74


Type No
Lot No
Idss
D
G
S

PDG020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32
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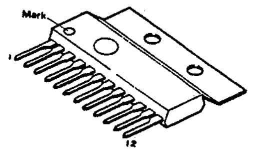
51
52
64
1

μPC1270H



6. ELECTRICAL PARTS LIST

NOTES:

- *Parts without part number cannot be supplied.*
- *Parts marked by "◉" are not always kept in stock. Their delivery time may be longer than usual or they may be unavailable.*
- *The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.*
- *For your parts Stock Control, the fast moving items are indicated with the marks ★★ and ★.*
  ★★ GENERALLY MOVES FASTER THAN ★
  This classification shall be adjusted by each distributor because it depends on model number, temperature, humidity, etc.
- *When ordering resistors, first convert resistance values into code form as shown in the following examples.*
  Ex. 1 When there are 2 effective digits (any digit apart from 0), such as 560 ohm and 47k ohm (tolerance is shown by J = 5%, and K = 10%).
  560Ω 56×10^1 561........................RD1/4PS 5 6 1 J
  47kΩ 47×10^3 473........................RD1/4PS 4 7 3 J
  0.5Ω 0R5...RN2H 0 R 5 K
  1Ω 010...RS1P 0 1 0 K

  Ex. 2 When there are 3 effective digits (such as in high precision metal film resistors).
  5.62kΩ 562×10^1 5621......................RN1/4SR 5 6 2 1 F

Miscellaneous Parts

P.C.BOARD ASSEMBIES

Mark	Symbol & Description	Part No.
	Pro logic assembly	AWX1016
	AF assembly	AWZ1961
	VIDEO/SUR/CONTROL assembly	AWZ1965
	Tuner assembly	AWZ1966
	Front control A assembly	AWZ1967
	Headphone assembly	
	Motor−volume assembly	
	Terminal assembly	
	Front control B assembly	
	Meter amp assembly	
	Rear amp assembly	
	Vol IND assembly	

OTHERS

Mark	Symbol & Description	Part No.
⚠★★	Q7,Q8 transistor	2SA1263N
⚠★★	Q3,Q4 transistor	2SA1302
⚠★★	Q5,Q6 transistor	2SC3180N
⚠★★	Q1,Q2 transistor	2SC3281
⚠ ★	T1 Power transformer (AC120V)	ATS1144
⚠	AC socket (3P OUTLET)	AKP−515 (AKP−504)
⚠★★	S1 Speaker impedance selector	AKX1004
⚠★★	FU3,FU4 Fuse (6A/125V)	AEK−109
⚠★★	FU1 Fuse (10A/125V)	AEK−310
⚠★★	FU5,FU6 Fuse (1.25A/125V)	AEK−120
⚠	AC power cord	ADG1031 (ADG1001)
⚠	R1 2.2MΩ	ACN−209

Pro logic assembly (AWX1016)

SEMICONDUCTORS

Mark	Symbol & Description	Part No.
★★	IC1123,IC1131	BU4066BL
★★	IC1130	CXD1067P
★★	IC1102−IC1105,IC1107−IC1109, IC1112,IC1117−IC1122,IC1124− IC1126,IC1128	M5218PF
★★	IC1113−IC1116	M5222L
★★	IC1106,IC1111	NJM082D
★★	IC1127	TC4011UBP
★★	IC1129	TC4052BP
★★	IC1101,IC1110	TC4066BP
★★	IC1132	TC9154AP
★★	Q1120−Q1122,Q1127	RN1203
★★	Q1119,Q1124,Q1125	RN2203
★★	Q1101−Q1106,Q1110−Q1115, Q1123,Q1126	2SA1048
★★	Q1108,Q1117	2SC2259
★★	Q1109,Q1118	2SC2458
★★	Q1107,Q1116	2SJ74
★	D1113,D1114	RD10ESB2
★	D1119	RD5.1ESB
★	D1115	RD5.6ESB
★	D1101−D1112,D1116−D1118	1SS252

CAPACITORS

Mark	Symbol & Description	Part No.
	C1173,C1174	CCMSL100D50
	C1141−C1144,C1171	CCMSL220J50
	C1111,C1149,C1150,C1153, C1163,C1170	CCMSL330J50
	C1115,C1122	CCMSL470J50
	C1157	CEANP010M50

Mark	Symbol & Description	Part No.
	C1113,C1124,C1125	CEAS010M50
	C1151,C1152,C1154−C1156, C1160,C1168,C1169,C1172	CEAS100M50
	C1179	CEAS101M16
	C1177	CEAS101M25
	C1126,C1127	CEAS2R2M50
	C1140	CEAS331M16
	C1164,C1165	CEAS331M25
	C1130−C1139	CEAS4R7M50
	C1112,C1166,C1167	CEAS470M16
	C1158,C1161,C1162	CFTXA103J50
	C1101−C1104,C1128,C1129, C1145,C1146,C1148	CFTXA104J50
	C1107,C1108,C1117,C1119	CFTXA223J50
	C1147	CFTXA224J50
	C1109,C1110,C1118,C1120	CFTXA334J50
	C1178	CKDYB222K50
	C1159	CKMYB221K50
	C1114,C1116,C1121,C1123	CKMYB471K50
	C1105,C1106	CKMYB681K50
	C1175,C1176	CKMYF472Z50

RESISTORS

Mark	Symbol & Description	Part No.
	R1113,R1114,R1130−R1132, R1134,R1135,R1140,R1141, R1148−R1150,R1165−R1168, R1170,R1171,R1175−R1180, R1182,R1183,R1190,R1192, R1194,R1196,R1198,R1200, R1202,R1204−R1244	RN1/4PC□□□□F
	Other resistors	RD1/8PM□□□J

AF assembly (AWZ1961)

SEMICONDUCTORS

Mark	Symbol & Description	Part No.
★★	IC153	M5201P
★★	IC151,IC152	M5218LF
★★	IC104	M5218PF
★★	IC165	M5220L
★★	IC51	M5220P
★★	IC505	NJM79M15A
★★	IC201,IC202	PA0016
★★	IC167	TC9154AP
★★	IC103	TC9162N
★★	IC101,IC102	TC9164N
★★	IC168	TC9184P
★★	IC503,IC504	μPC78M05H
★★	IC502	μPC78M15H
★★	IC501	μPC7812H
★★	Q151,Q501,Q508,Q509,Q511	RN1201
★★	Q512	2SA1048
★★	Q207,Q208	2SA1145P
★★	Q213,Q214	2SA968
★★	Q201,Q202	2SA979
★★	Q211,Q212	2SC2238
★★	Q205,Q206,Q215,Q216,Q507	2SC2240
★★	Q101,Q102,Q502,Q503,Q505, Q506,Q513	2SC2458
★★	Q209,Q210	2SC2705P
★	D514	D5SB20F
★	D217	RD24EB
★	D512	RD4.7ESB
★	D165,D166	RD5.1ESB2
★	D527	RD5.6ESB2
★	D526	RD9.1EB
★	D201−D216,D218,D219,D501− D505,D507,D515,D516,D521− D525,D528−D531,D535	1SS252
★	D508−D511,D517−D520	11E2
★	D513	4D4B44

RELIES

Mark	Symbol & Description	Part No.
★★	RY503,RY504	ASR−112
★★	RY501	ASR−512
★★	RY502,RY505	ASR1005

COILS &TRANSFORMERS

Mark	Symbol & Description	Part No.
	L201,L202 AF choke coil (0.7μH)	ATH1004
	L601,L602 AF choke coil (0.7μH)	ATH1011
★	T501 Power transformer	ATT1015

CAPACITORS

Mark	Symbol & Description	Part No.
	C515−C517 (0.01μF/125V)	ACG1003
	C505,C506 (5600μF/42V)	ACH1047
	C503,C504 (8200μF/75V)	ACH1085
	C215,C216 Ceramic capacitor	CCCSL101K500
	C207,C208 Ceramic capacitor	CCCSL270K500
	C217,C218	CCDSL101K500
	C53,C54	CCCSL221J50
	C225,C226	CCCSL151J50
	C101−C114	CCMSL101J50
	C171,C172,C211−C214	CCMSL680J50
	C219,C220	CEANP2R2M50
	C64,C169,C170,C518,C523, C524,C526	CEAS010M50
	C51,C52,C179,C180,C508, C509,C512	CEAS100M25
	C521,C527	CEAS100M50
	C510	CEAS102M25
	C514	CEAS102M35
	C61,C62,C115−C118,C121, C122,C151,C152,C154,C157, C159,C160−C162,C167,C168,	CEAS2R2M50
	C201,C202,C227	CEAS220M50
	C502	CEAS221M10
	C229,C230	CCDSL020C500

Mark	Symbol & Description	Part No.
	C231−C234	CEAS100M100
	C513	CEAS222M35
	C153	CEAS470M16
	C522,C525	CEHAQ010M50
	C507,C511	CEHAQ470M25
	C55,C56,C209,C210,C501	CEAS471M6
	C221−C224,C613,C614	CFTXA104J50
	C123,C124,C177,C178,C181, C182	CFTXA153J50
	C57,C58	CFTXA243J50
	C155	CFTXA333J50
	C59,C60,C183,C184	CFTXA823J50
	C191,C192	CKDYB472K50
	C125,C126,C173,C174,C520	CKDYF103Z50
	C63	CKDYX104M25
	C205,C206	CKMYB331K50
	C203,C204	CKMYB152K50
	C158	CKMYF222Z50
	C185,C186	CQMA152J50
	C175,C176	CQMA272J50
	C156	CQMA332J50
	C119,C120	CQMA392K50
	C519	CKDYF473Z50

RESISTORS

Mark	Symbol & Description	Part No.
	R259,R260	ACN1018
	R269−R272	RS1LMF100J
	R277,R541,R542	RS2LMF□□□J
	R505,R506	RS3LMF□□□J
	R217,R218	RDR1/2PM□□□J
	R201−R204	RDR1/4PM□□□J
	R211−R216	RD1/4PMF□□□J
	R239−R246,R251−R258, R261−R264,R516−R518,R543, R544,R546,R621−R624	
	R231−R234,R247−R250	RFA1/4PS□□□J
	R207−R210,R219−R224	RD1/4PM□□□J
	Other resistors	RD1/8PM□□□J

OTHERS

Mark	Symbol & Description	Part No.
	4P Pin jack	AKB1007
	6P Pin jack	AKB1008
	2P Pin jack	AKB1039
	2P Pin jack	AKB1059
	4P Speaker terminal	AKE1007
	4P Speaker terminal	AKE1011
	Screw	ABA1012

VIDEO/SUR/CONTROL assembly (AWZ1965)

SEMICONDUCTORS

Mark	Symbol & Description	Part No.
★★	IC301,IC302,IC304	CX−894
★★	IC424	LA2730
★★	IC403	M5K4164AP−15
★★	IC402	M50199P
★★	IC371	M51848P
★★	IC421−IC423,IC426, IC428−IC430	M5218PF
★★	IC401	M5233P
★★	IC341	NJM2209S
★★	IC303,IC305,IC306,IC309	NJM2233BS
★★	IC307	NJM2235S
★★	IC391	PDG021−A
★★	IC427	TC4066BP
★★	IC425	TC9154AP
★★	IC308	μPC78L05
★★	Q393	RN1201
★★	Q310,Q313−Q316,Q316,Q427	RN1203
★★	Q309	RN2201
★★	Q424−Q426	RN2203
★★	Q301,Q304,Q305,Q308,Q373, Q375,Q431	2SA1048
★★	Q302,Q303,Q306,Q307,Q311, Q341−Q344,Q346,Q371,Q372, Q374,Q376,Q391,Q394	2SC2458
★★	Q421,Q422,Q428−Q430	2SC2878
★	D425,D426	RD5.1ESB
★	D371,D372,D374−D376, D391−D396,D401,D421−D424, D427,D428,D430	1SS252

COILS & TRANSFORMERS

Mark	Symbol & Description	Part No.
	L371 Axial inductor (10μH)	LAU100K
	L344,L349,L391,L401 Axial inductor (100μH)	LAU101K
	L341,L345,L346 Axial inductor (220μH)	LAU221K
	L342,L347 Axial inductor (27μH)	LAU270K
	L343,L348 Axial inductor (39μH)	LAU390K
	L372 Axial inductor (47μH)	LAU470K
	L402,L403 Inductor (8.2μH)	LTA822J

CAPACITPRS

Mark	Symbol & Description	Part No.
	C392 (47000μF/5.5V)	ACH1011
	C346	CCCSL151J50
	C345	CCCSL221J50
	C374	CCMCH220J50
	C352,C362	CCMSL030C50

Mark	Symbol & Description	Part No.
	C357,C361	CCMSL050C50
	C354	CCMSL060D50
	C341	CCMSL070D50
	C367	CCMSL100D50
	C375,C382	CCMSL101J50
	C365	CCMSL120J50
	C356	CCMSL150J50
	C348,C461	CCMSL220J50
	C343,C355,C371,C379−C381, C455	CCMSL470J50
	C342,C353	CCMSL680J50
	C408	CEANP100M16
	C402	CEANP4R7M35
	C435	CEASR33M50
	C320−C322,C358,C366, C424−C426,C434,C437 C438,C457	CEAS010M50
	C344,C349,C350,C383,C385, C393,C422,C427	CEAS100M50
	C351,C363,C391,C412,C418, C429,C443,C446	CEAS101M10
	C373,C378,C440,C441	CEAS101M16
	C306,C312−C314	CEAS102M10
	C444,C445,C451−C454	CEAS2R2M50
	C430,C467	CEAS220M16
	C447−C450,C466,C468,C469	CEAS4R7M50
	C302,C303,C305,C307−C311, C315−C319,C323,C324,C359, C364,C368,C370,C384,C403, C415	CEAS470M16
	C421	CEJA100M16
	C417	CEAS471M10
	C401	CFTXA103J50
	C404,C407,C433	CFTXA104J50
	C459,C460	CFTXA183J50
	C432,C439	CFTXA333J50
	C413,C414	CFTXA823J50
	C369,C394	CGMYX103M16
	C376,C411,C419	CKCYB103K50
	C347	CKCYB472K50
	C372	CKCYX104M25
	C416,C471	CKDYB103K50
	C436	CKMYB471K50
	C470	CKDYX223M25
	C431	CQMA472K50
	C406,C409,C458	CQMA562K50
	C423,C428	CQMA682K50
	C405,C410	CQSA561J50
	C377	CQSA821J50

RESISTORS

Mark	Symbol & Description	Part No.
	VR421 Variable resistor (100kΩ)	ACS1020
	VR422 Semi−fixed resistor (22kΩ)	VRTB6VS223
	Other resistors	RD1/8PM☐☐☐J

OTHERS

Mark	Symbol & Description	Part No.
	1P Pin jack	AKB1010
	1P Pin jack	AKB1011
	3P Pin jack	AKB1050
	6P Pin jack	AKB1058
	2P Mini jack	AKN1006
	5P DIN socket	AKP−081
	X401 Ceramic resonator(3.27MHz)	ASS1016
	X391 Ceramic resonator(4.19MHz)	ASS1022

Tuner assembly (AWZ1966)

SEMICONDUCTORS

Mark	Symbol & Description	Part No.
★★	IC751	AN7470P
★★	IC731	LA1265S
★★	IC771	LM7001
★★	Q773,Q775	RN2201
★★	Q763	2SA1048
★★	Q772	2SC1740SLN
★★	Q751,Q761,Q762,Q774	2SC2458
★★	Q703,Q721	2SC2668
★★	Q702	2SC2786
★★	Q704,Q705	2SK161
★★	Q701	2SK241
★★	Q771	2SK246
★	D771,D772	SVC321C2−SP
★	D731−D734,D751	1SS252
★	D701−D703	1SV147

COILS & TRANSFORMERS

Mark	Symbol & Description	Part No.
★	T771 AM antanna transformer	ATB−095
	L771 AM OSC coil	ATB−100
★	T701 FM RF transformer	ATC−194
	L701 FM coil	ATC1001
	L702 FM coil	ATC1002
	L705 FM coil	ATC1003
★	T702 FM coupling transformer	ATE−063
★	T732 FM detector transformer	ATE1001
★	T731 FM detector transformer	ATE1002
	F722 FM Ceramic filter	ATF−107
	F721 FM Ceramic filter	ATF−119
	F751 Low pass filter	ATF−164
	F731 AM Ceramic filter	ATF−208
	L703,L704,L732,L733,L772 Axial inductor (2.2μH)	LAU2R2M
	L731 Inductor (4.7M)	LTA472J

CAPACITORS

Mark	Symbol & Description	Part No.
	TC771,TC772 Ceramic trimmer	ACM−015
	C708	CCDCH010C50
	C706	CCDCH020C50
	C701,C704,C705	CCDRH330J50
	C702	CCDRH390J50

Mark	Symbol & Description	Part No.
	C744	CCDSL221J50
	C716	CCDTH180J50
	C774	CCMCH070D50
	C715	CCMCH080D50
	C713,C781,C782	CCMCH150J50
	C714	CCMCH330J50
	C709	CCMSL101J50
	C765	CCMSL121J50
	C731	CCMSL470J50
	C752	CEANP100M16
	C757	CEASR22M50
	C778	CEASR47M50
	C742	CEAS0R1M50
	C743	CEAS010M50
	C756	CEAS1R5M50
	C737,C745,C751,C769,C770, C776	CEAS100M50
	C738	CEAS2R2M50
	C784	CEAS220M16
	C763	CEAS220M25
	C734,C755	CEAS3R3M50
	C788,C789	CEAS330M16
	C733,C761,C762	CEAS4R7M50
	C758	CEAS470M16
	C736	CFTXA683J50
	C703,C710−C712,C718,C721, C722,C771−C773,C777,C780, C783,C787	CGMYX103M16
	C735	CKCYB472K50
	C753,C764	CKCYF473Z50
	C732,C739,C740	CKCYX473M25
	C741	CKDYF223Z50
	C779	CKMYB102K50
	C759,C760	CQMA102J50
	C767,C768	CQMA561K50
	C775	CQSA431J50
	C754	CQSA471J50

RESISTORS

Mark	Symbol & Description	Part No.
	VR752 Semi−fixed resistor	VRTB6VS224
	VR751 Semi−fixed resistor	VRTB6VS472
	R752	RN1/4PC1502F
	Other resistors	RD1/8PM☐☐☐J

OTHERS

Mark	Symbol & Description	Part No.
	4P Antenna terminal	AKA1003
	X771 Crystal resonator(7.2MHz)	ASS1005
	X731 Ceramic filter	ATF−125

Front control A assembly (AWZ1967)

SEMICONDUCTORS

Mark	Symbol & Description	Part No.
★★	IC801	PDG020−A
★★	Q801	RN1203
★★	Q802−Q811	2SC2458
★	D801−D813	1SS252

SWITCHES

Mark	Symbol & Description	Part No.
★★	S801−S820,S822, S825−S830,S834−S853, S855−S863 Tact switch	ASG−711

COIL &TRANSFORMER

Mark	Symbol & Description	Part No.
	L801 Axial inductor (10μH)	LAU100K

CAPACITORS

Mark	Symbol & Description	Part No.
	C801,C802	CCDCH101J50
	C807	CEJA0R1M50
	C803,C805,C806	CEJA100M16

RESISTORS

Mark	Symbol & Description	Part No.
	VR802 Variable resistor	ACS1021
	VR801 Variable resistor	ACS1022
	Other resistors	RD1/8PM☐☐☐J

OTHERS

Mark	Symbol & Description	Part No.
	REMOCONE SENSOR assembly	AXX1005
	V801 Fluorescent indicator tube	AAV1054
	X801 Ceramic resonator (503kHz)	ASS1004

Headphone assembly

Mark	Symbol & Description	Part No.
	Headphone jack	AKN1002

Motor−volume assembly

SEMICONDUCTORS

Mark	Symbol & Description	Part No.
★★	IC154	M5220L
★★	IC671	TA7291S

COIL & TRANSFORMER

Mark	Symbol & Description	Part No.
	F671 EMI filter	ATF1010

CAPACITOR

Mark	Symbol & Description	Part No.
	C675	CEJA100M50
	C163,C164	CKDYF103Z50
	C165,C166	CKMYB331K50

RESISTORS

Mark	Symbol & Description	Part No.
	VR671 Variable resistor with motor (100kΩ × 2 20kΩ × 3)	ACX1016
	Other resistors	RD1/8PM□□□J

Terminal assembly

Mark	Symbol & Description	Part No.

No parts are supplied with the Terminal assembly.

Front control B assembly

SWITCHES

Mark	Symbol & Description	Part No.
★★	S823,S824,S831,S832,S833	ASG−711

Meter amp assembly

SEMICONDUCTORS

Mark	Symbol & Description	Part No.
★★	IC631−IC633	M5218LF
★★	Q631−Q635	2SC2458
★	D641−D645	RD5.6ESB3
★	D636−D640	1SS252

CAPACITORS

Mark	Symbol & Description	Part No.
	C631−C635	CEASR47M50

RESISTORS

Mark	Symbol & Description	Part No.
	All resistors	RD1/8PM□□□J

Rear assembly

SEMICONDUCTORS

Mark	Symbol & Description	Part No.
★★	IC601,IC602	μPC1270H
★★	Q601,Q602	2SC2458

CAPACITORS

Mark	Symbol & Description	Part No.
	C607,C608	CCMSL150J50
	C615,C616	CEAS100M50
	C605,C606,C609,C610	CEAS101M10
	C601,C602	CEAS2R2M50
	C611,C612	CFTXA333J50
	C603,C604	CKMYB102K50
	C617,C618	CKMYB471K50

RESISTORS

Mark	Symbol & Description	Part No.
	R619,R620	ACN−131
	Other resistors	RD1/8PM□□□J

Vol IND assembly

SEMICONDUCTOR

Mark	Symbol & Description	Part No.
★	D761	AEL1053

OTHER

Mark	Symbol & Description	Part No.
	Terminal strip	AKF1006

7. ADJUSTMENTS

7. 1 TUNER SECTION

FM Tuner section

- Connect the FM signal generator (FM SG) to the FM ANTENNA 300Ω terminal through a 300Ω dummy antenna.
- Set the AUT/MANUAL switch to the MANUAL position and the FUNCTION switch to the FM.

FM MONO ADJUSTMENT

Step	FM SG (1kHz±75kHz dev.)		Frequency display	Adjustment point	Adjustment procedure
	Frequency	Level			
1	No signal		87.5MHz	——	Check TP-VT (3.4±1.5V) of tuner assembly.
2			108MHz		Check TP-VT ($8.7^{+2.5V}_{-2.0V}$) of tuner assembly.
3	98MHz	20~30dB	98MHz	T701,L702, T702	Set the output from TP-SIGNAL of assembly to maxium level.
4	98MHz	60dB	98MHz	T732	Adjust voltage across pins 28 and 29 of assembly to T meter center.
5	98MHz	60dB	98MHz	T731	Minimize distortion.
6	Repeat steps 4 and 5 until both specification ratings are staisfied.				

FM MPX ADJUSTMENT

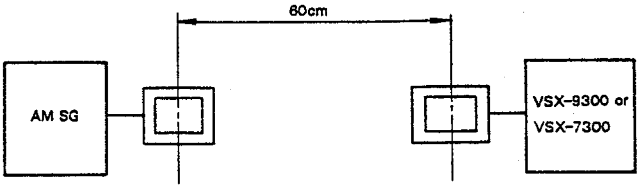
7	98MHz	80dB	98MHz	VR751	Adjust the freqency at pin TP−VCO of tuner assembly to 76.0kHz (±100Hz)
	No modulation				
8	98MHz	80dB	98MHz	T702	Minimize distortion in both left and right channel outputs (adjust T702 to within ±90°)
	Stereo modulation*				
9	98MHz	60dB	98MHz	VR752	Maximize separation.
	Stereo modulation*				
10	98MHz	10dB	98MHz	——	Confirm that TUNED IND and STEREO IND are extinguished.
	Stereo modulation*				
* Stereo modulation:Main 1kHz L+R±68.25kHz dev. Pilot 19kHz±6.75kHz dev.					

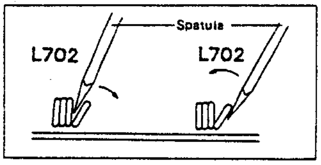
AM (MW) Tuner section

- Connect loop antenna to the AM signal generator (AM SG) and connect the LOOP antenna (of the set) to AM ANTENNA terminal.
- Set the FUNCTION switch to the AM (MW) .

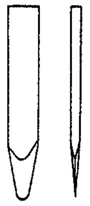
Step	AM SG (400Hz, 30% MOD)		Frequency display	Adjustment point	Adjustment procedure
	Frequency	Level			
1	No signal		530kHz	L771	Set TP−VT of tuner assembly to 1.2V (±0.05V)
2			1700kHz	TC772	Set TP−VT of tuner assembly to 10.0V (±0.1V)
3	Repeat steps 1 and 2 until both specification ratings are staisfied.				
4	600kHz	40dB	600kHz	T771	Set the output from TP−SIGNAL of tuner assembly to maximum level.
5	1400kHz	40dB	1400kHz	TC771	
6	Repeat steps 4 and 5 until both specification ratings are staisfied.				
7	1000kHz	60dB	1000kHz		Confirm that TUNED IND becomes lit.

- The distance between AM SG side loop antenna A and the receiver side (VSX-9300 or VSX-7300) loop antenna B, that is, from the center of A side loop antenna to that of B side loop antenna should be 60cm.

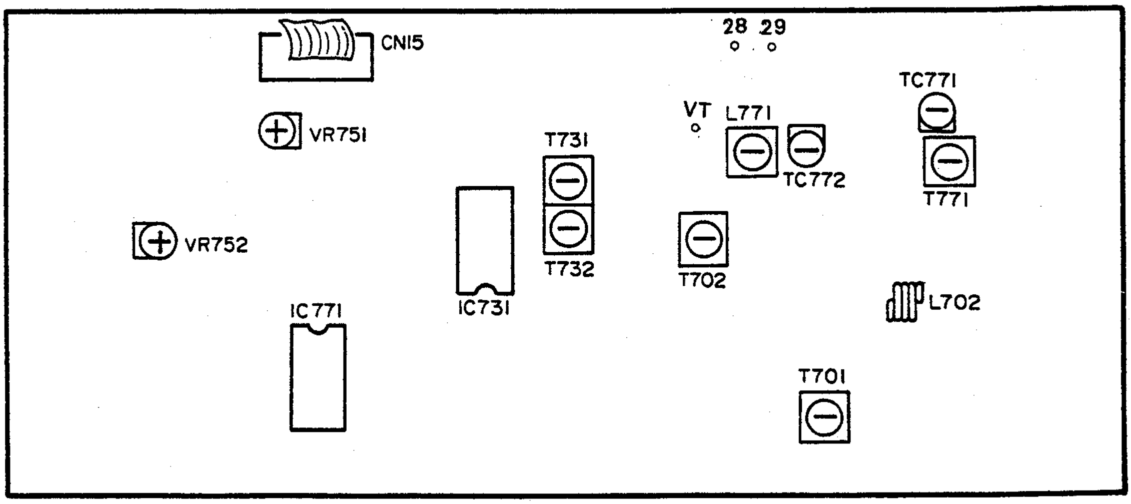

60cm
AM SG
VSX-9300 or
VSX-7300


Spatula
L702
L702

Adjust by making this space between windings of a coil wider or closer with a spatula.



Spatula
Use a spatula whose an edges is thin.


CN15
28 29
TC771
VR751
VT
L771
T731
TC772
T771
VR752
T732
T702
IC771
IC731
L702
T701

TUNER ASSEMBLY (AWZ1966)

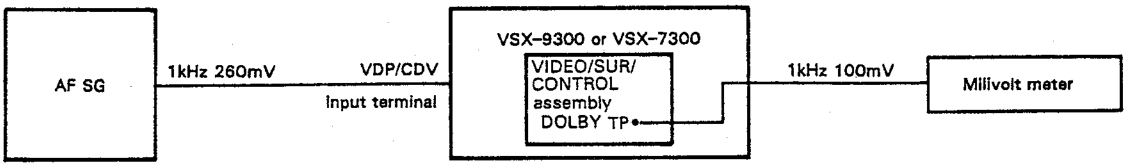
7.2 SURROUND AMP SECTION

•SURROUND LEVEL ADJUSTMENT Preparation

1) Adjust the SURROUND BALANCE VR (VR421) on the rear side to center clicking position.
2) Set the SURROUND MODE to the DOLBY SURROUND (VSX-7300 type)

* Set the SURROUND MODE to the STADIUM (VSX-9300 type)

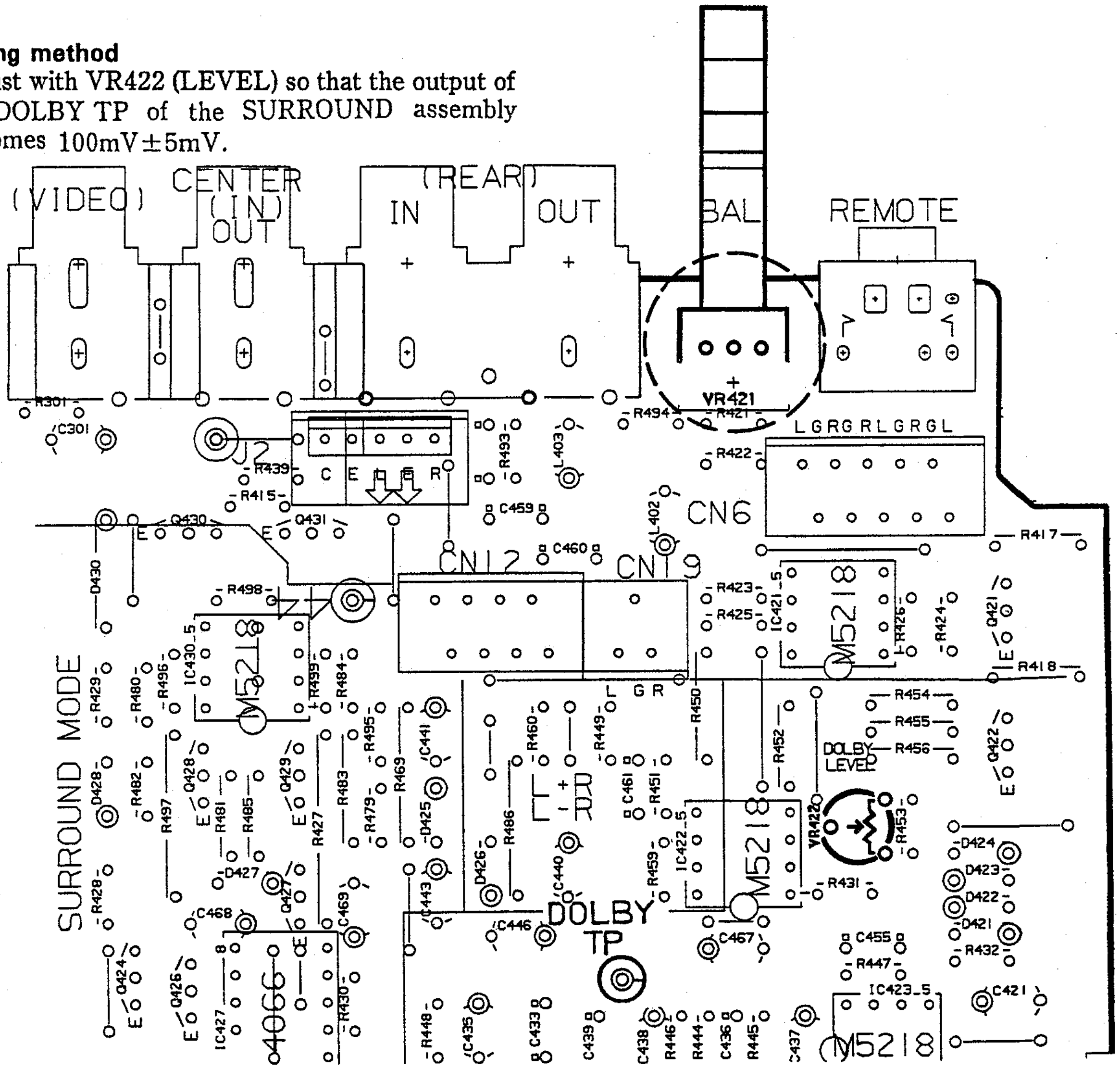
3) Input sine wave signal of 1kHz, 260mV to the VDP/CDV input. Lch (or Rch) only.
(Be sure that the small signal assembly is operating normally.)


AF SG
1kHz 260mV
VDP/CDV
input terminal
VSX-9300 or VSX-7300
VIDEO/SUR/
CONTROL
assembly
DOLBY TP
1kHz 100mV
Milivolt meter

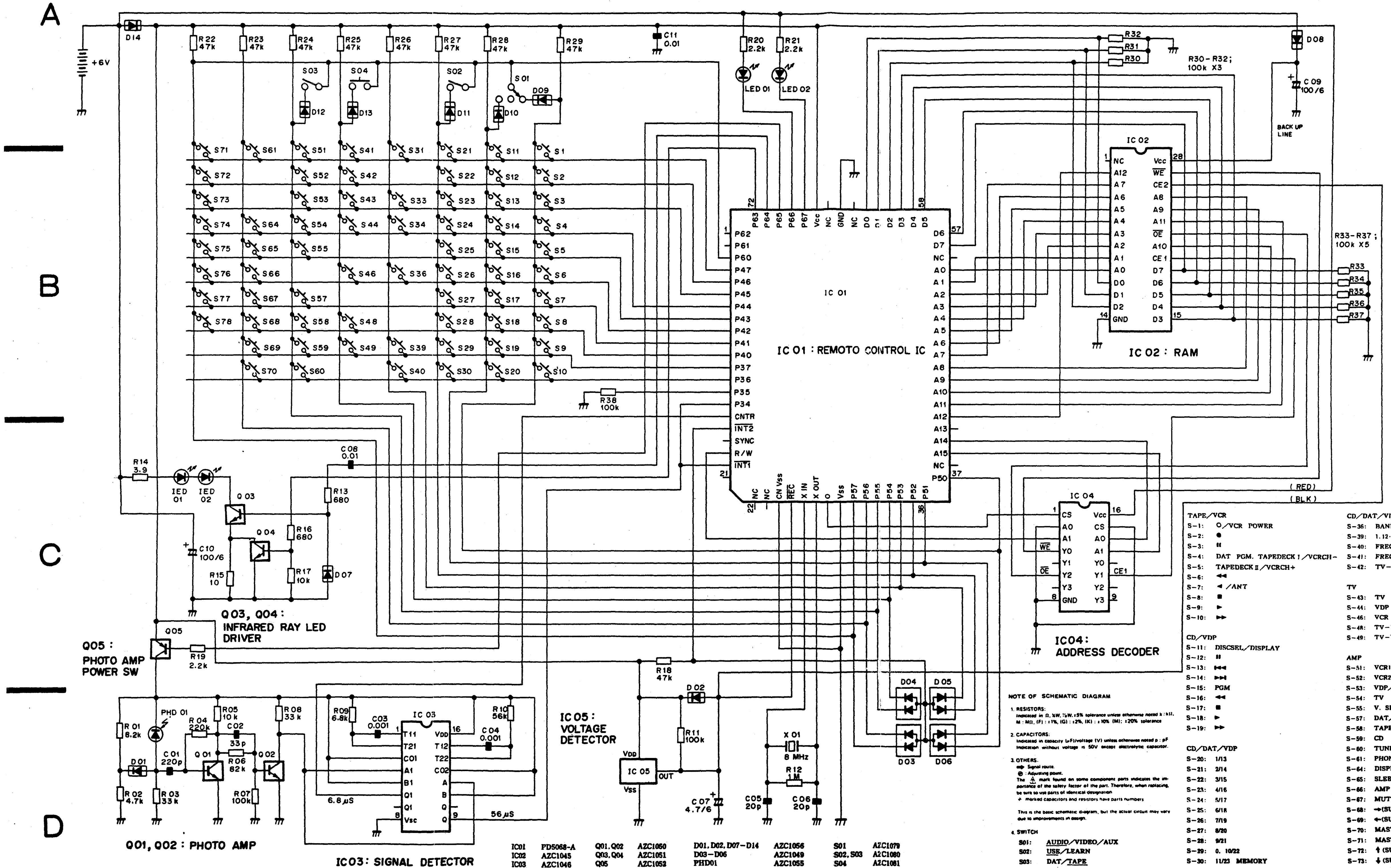
Connection diagram

Adjusting method

1) Adjust with VR422 (LEVEL) so that the output of TP DOLBY TP of the SURROUND assembly becomes 100mV±5mV.


(VIDEO)
CENTER
(IN)
OUT
(REAR)
IN
OUT
BAL
REMOTE
VR421
R421
R494
R422
CN6
L G R G R L G R G L
R417
R418
CN12
CN19
C459
C460
R493
L403
L402
J2
R439
R415
C E
R
Q430
Q431
D430
R498
R301
C301
IC430_5
M5218
R499
R484
R429
R480
R496
SURROUND MODE
D428
R482
R497
Q428
R481
R485
Q429
R427
R483
R479
R495
R469
D425
C441
R460
R449
C461
R451
R450
R452
R423
R425
IC421_5
R426
R424
Q421
R454
R455
R456
DOLBY LEVEL
VR422
R453
Q422
D424
D423
D422
D421
R432
R431
IC422_5
R459
C440
R486
D426
C443
C446
DOLBY TP
C467
C455
R447
IC423_5
C421
M5218
R428
D427
C468
Q427
C469
Q424
Q426
IC427
4066
R430
R448
C435
C433
C439
C438
R446
R444
C436
R445
C437

8.3 SCHEMATIC DIAGRAM


A
B
C
D
+6V
D14
R22 47k
R23 47k
R24 47k
R25 47k
R26 47k
R27 47k
R28 47k
R29 47k
C11 0.01
R20 2.2k
R21 2.2k
LED 01
LED 02
R32
R31
R30
R30–R32; 100k X3
D08
C09 100/6
BACK UP LINE
S03
S04
S02
S01
D09
D12
D13
D11
D10
IC 02
IC 01
IC 01 : REMOTO CONTROL IC
IC 02 : RAM
R33–R37 ; 100k X5
R38 100k
R14 3.9
IED 01
IED 02
Q 03
Q 04
C08 0.01
R13 680
R16 680
R17 10k
D 07
C10 100/6
R15 10
Q03, Q04 : INFRARED RAY LED DRIVER
Q05
Q05 : PHOTO AMP POWER SW
R19 2.2k
(RED)
(BLK)
IC 04
IC04: ADDRESS DECODER
R18 47k
D 02
R11 100k
IC05 : VOLTAGE DETECTOR
IC 05
C 07 4.7/6
X 01 8 MHz
R12 1M
C05 20p
C06 20p
D04
D05
D03
D06
PHD 01
R 01 8.2k
R 02 4.7k
R 03 33k
D 01
C 01 220p
R 04 220k
R05 10k
C02 33p
R06 82k
R07 100k
R08 33k
Q 01
Q 02
Q01, Q02 : PHOTO AMP
R09 6.8k
C03 0.001
IC 03
R10 56k
C04 0.001
6.8 µS
56 µS
IC03: SIGNAL DETECTOR

IC01	PD5068-A	Q01, Q02	AZC1050	D01, D02, D07–D14	AZC1056	S01	AZC1079
IC02	AZC1045	Q03, Q04	AZC1051	D03–D06	AZC1049	S02, S03	AZC1080
IC03	AZC1046	Q05	AZC1052	PHD01	AZC1055	S04	AZC1081
IC04	AZC1047			LED01, LED02	AZC1054		
IC05	AZC1048						

NOTE OF SCHEMATIC DIAGRAM

1. RESISTORS:
Indicated in Ω, ¼W, ⅛W, ±5% tolerance unless otherwise noted k : kΩ, M : MΩ, (F) : ±1%, (G) : ±2%, (K) : ±10% (M): ±20% tolerance

2. CAPACITORS:
Indicated in capacity (µF)/voltage (V) unless otherwise noted p : pF
Indication without voltage is 50V except electrolytic capacitor.

3. OTHERS.
➡ Signal route.
⊘ : Adjusting point.
The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation
* marked capacitors and resistors have parts numbers

This is the basic schematic diagram, but the actual circuit may vary due to improvements in design.

4. SWITCH

S01: AUDIO/VIDEO/AUX
S02: USE/LEARN
S03: DAT/TAPE
S04: RESET

The underlined indicates the switch position.

TAPE/VCR
S–1: ○/VCR POWER
S–2: ●
S–3: ❚❚
S–4: DAT PGM. TAPEDECK I/VCRCH–
S–5: TAPEDECK II/VCRCH+
S–6: ◀◀
S–7: ◀ /ANT
S–8: ■
S–9: ▶
S–10: ▶▶

CD/VDP
S–11: DISCSEL/DISPLAY
S–12: ❚❚
S–13: |◀◀
S–14: ▶▶|
S–15: PGM
S–16: ◀◀
S–17: ■
S–18: ▶
S–19: ▶▶

CD/DAT/VDP
S–20: 1/13
S–21: 2/14
S–22: 3/15
S–23: 4/16
S–24: 5/17
S–25: 6/18
S–26: 7/19
S–27: 8/20
S–28: 9/21
S–29: 0. 10/22
S–30: 11/23 MEMORY
S–31: 12/24 CLEAR

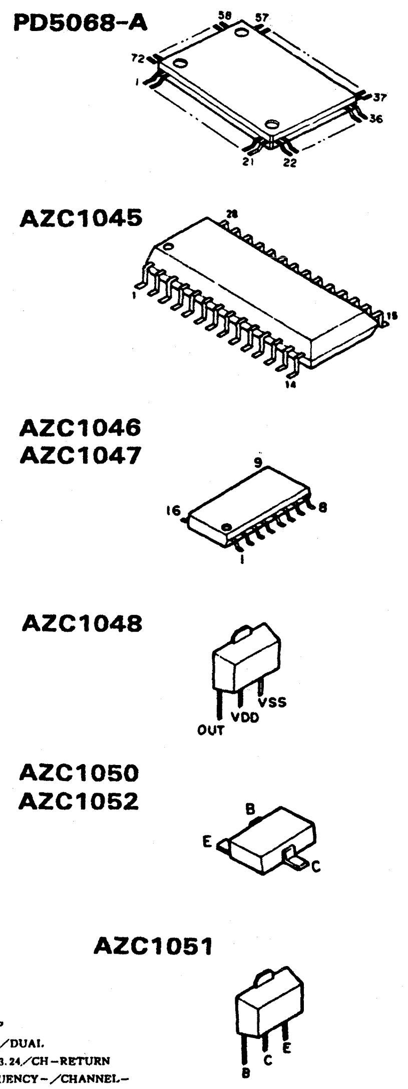
PHONO/VDP
S–33: ■/CHP. FR–TM
S–34: ▶/SEARCH

CD/DAT/VDP
S–36: BAND/DUAL
S–39: 1.12·13.24/CH–RETURN
S–40: FREQUENCY–/CHANNEL–
S–41: FREQUENCY+/CHANNEL+
S–42: TV–POWER

TV
S–43: TV
S–44: VDP
S–46: VCR
S–48: TV–VOL–
S–49: TV–VOL+

AMP
S–51: VCR1
S–52: VCR2
S–53: VDP/CDV
S–54: TV
S–55: V. SEL
S–57: DAT/TAPE1
S–58: TAPE2
S–59: CD
S–60: TUNER
S–61: PHONO
S–64: DISPLAY
S–65: SLEEP
S–66: AMP POWER
S–67: MUTING
S–68: →(SURROUND)
S–69: ←(SURROUND)
S–70: MASTER VOLUME–
S–71: MASTER VOLUME+
S–72: ↑ (SURROUND)
S–73: ↓ (SURROUND)
S–74: SURROUND MODE
S–75: DELAY TIME
S–76: REAR R
S–77: REAR L
S–78: ACOUSTIC

External Appearance of Transistors and ICs.


PD5068-A
38
57
72
1
37
36
21
22
AZC1045
28
1
15
14
AZC1046
AZC1047
9
16
8
1
AZC1048
OUT
VDD
VSS
AZC1050
AZC1052
B
E
C
AZC1051
B
C
E

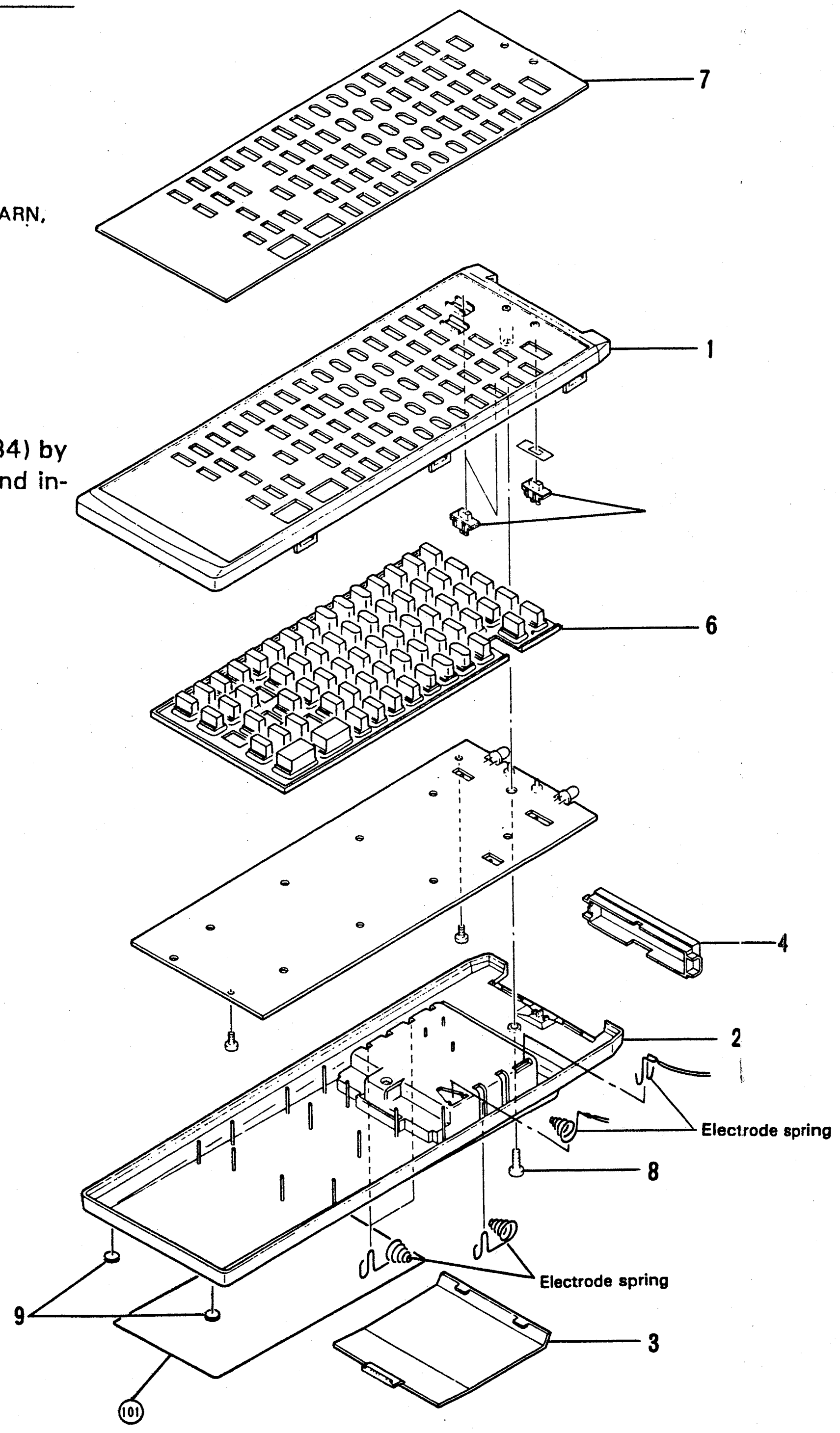
8. REMOTE CONTROL UNIT (AXD1055)

8.1 EXPLODED VIEWS AND PARTS LIST

PARTS LIST OF EXPLODED VIEWS

Mark	No.	Parts No.	Description
	1	AZH1033	Case (A)
	2	AZH1034	Case (B)
	3	AZH1035	Case (C)
	4	AZN1400	Filter
	5	AZA1086	Rubber switch
	6	AZS1042	Knob (AUDIO/VIDEO /AUX, USE/LEARN, DAT/TAPE)
	7	AZA1123	Name plate
	8	AZB1124	Screw
	9	AZN1401	Foot
	101		Rear name plate

※ When replacing the case No.2 (B) (AZH1034) by a new one, remove all electrode springs and install them into the new case (B).



8.2 ELECTRICAL PARTS LIST

NOTES:

- *Parts without part number cannot be supplied.*
- *Parts marked by "◉" are not always kept in stock. Their delivery time may be longer than usual or they may be unavailable.*
- *The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.*
- *When ordering resistors, first convert resistance values into code form as shown in the following examples.*

Ex. 1 When there are 2 effective digits (any digit apart from 0), such as 560 ohm and 47k ohm (tolerance is shown by J = 5%, and K = 10%).

560Ω	*56×10^1*	*561*	*RD1/4PS* $\boxed{5}\boxed{6}\boxed{1}$ *J*
47kΩ	*47×10^3*	*473*	*RD1/4PS* $\boxed{4}\boxed{7}\boxed{3}$ *J*
0.5Ω	*0R5*		*RN2H* $\boxed{0}\boxed{R}\boxed{5}$ *K*
1Ω	*010*		*RS1P* $\boxed{0}\boxed{1}\boxed{0}$ *K*

Ex. 2 When there are 3 effective digits (such as in high precision metal film resistors).

5.62kΩ	*562×10^1*	*5621*	*RN1/4SR* $\boxed{5}\boxed{6}\boxed{2}\boxed{1}$ *F*

SEMICONDUCTORS

Mark	Symbol & Description	Part No.
★★	IC01	PD5068-A
★★	IC02	AZC1045
★★	IC03	AZC1046
★★	IC04	AZC1047
★★	IC05	AZC1048
★★	Q01, Q02	AZC1050
★★	Q03, Q04	AZC1051
★★	Q05	AZC1052
★	D01, D02, D07-D14	AZC1056
★	D03-D06	AZC1049
★	PHD01	AZC1055
★	LED01, LED02	AZC1054
★	IED02, IED02	AZC1053

SWITCH

Mark	Symbol & Description		Part No.
★★	S01	Slide switch (AUDIO/ VIDEO/AUX)	AZC1079
★★	S02, S03	Slide switch (USE/ LEARN, DAT/TAPE)	AZC1080
★★	S04	Tact switch (RESET)	AZC1081

CAPACITORS

Mark	Symbol & Description		Part No.
	C01	(200P)	AZC1058
	C02	(33P)	AZC1059
	C03, C04	(0.001μF)	AZC1062
	C05, C06	(20P)	AZC1060
	C07	Electrolytic capacitor (4.7/6V)	CEAS4R7M6
	C08	(0.01)	AZC1061
	C09	Electrolytic capacitor (100/6V)	CEAS101M6
	C10	Electrolytic capacitor (100/6V)	CEAS101M6
	C11	(0.01)	AZC1063

RESISTORS

Mark	Symbol & Description		Part No.
	R01	(8.2K)	AZC1064
	R02	(4.7K)	AZC1065
	R03, R08	(33K)	AZC1066
	R04	(220K)	AZC1067
	R05, R17, R39	(10K)	AZC1068
	R06	(82K)	AZC1069
	R07, R11, R30-R38	(100K)	AZC1073
	R09	(6.8K)	AZC1070
	R10	(56K)	AZC1071
	R12	(1M)	AZC1072
	R13, R16	(680Ω)	AZC1075
	R14	(3.9Ω)	AZC1078
	R15	(10Ω)	AZC1076
	R18, R22-R29	(47K)	AZC1077
	R19-R21	(2.2K)	AZC1074

OTHERS

Mark	Symbol & Description		Part No.
	X1	Resonator (8MHz)	AZC1057

8.4 P.C.BOARD PATTERNS

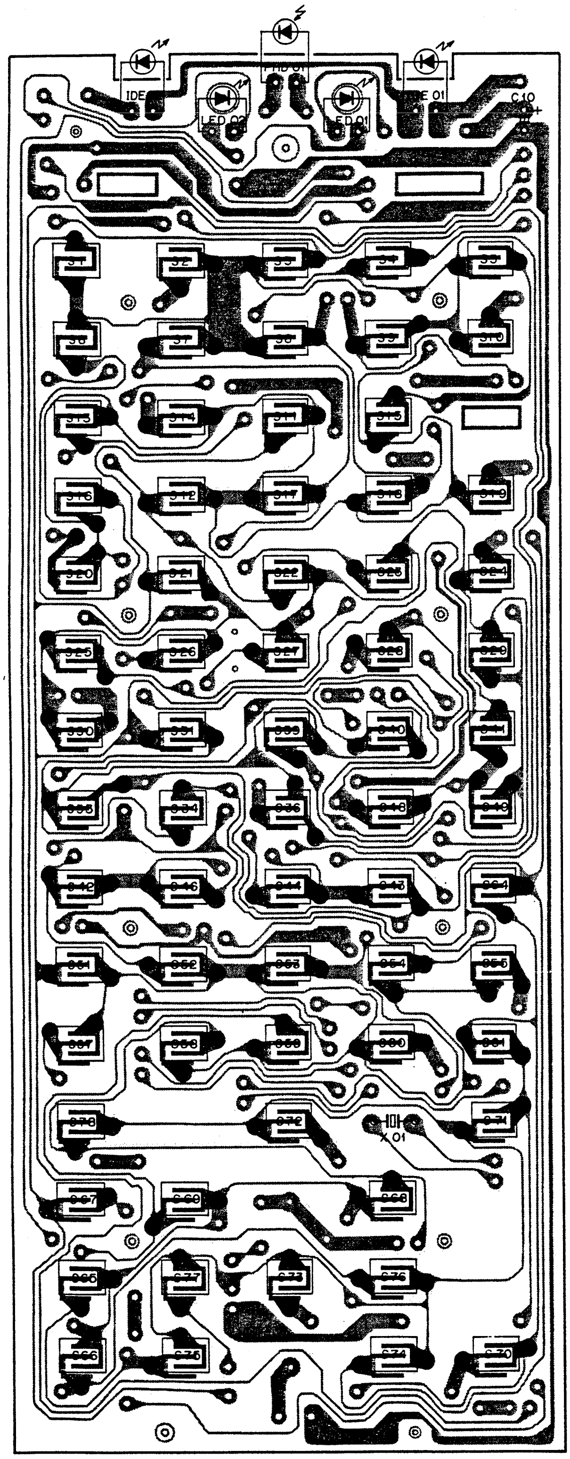
NOTE :

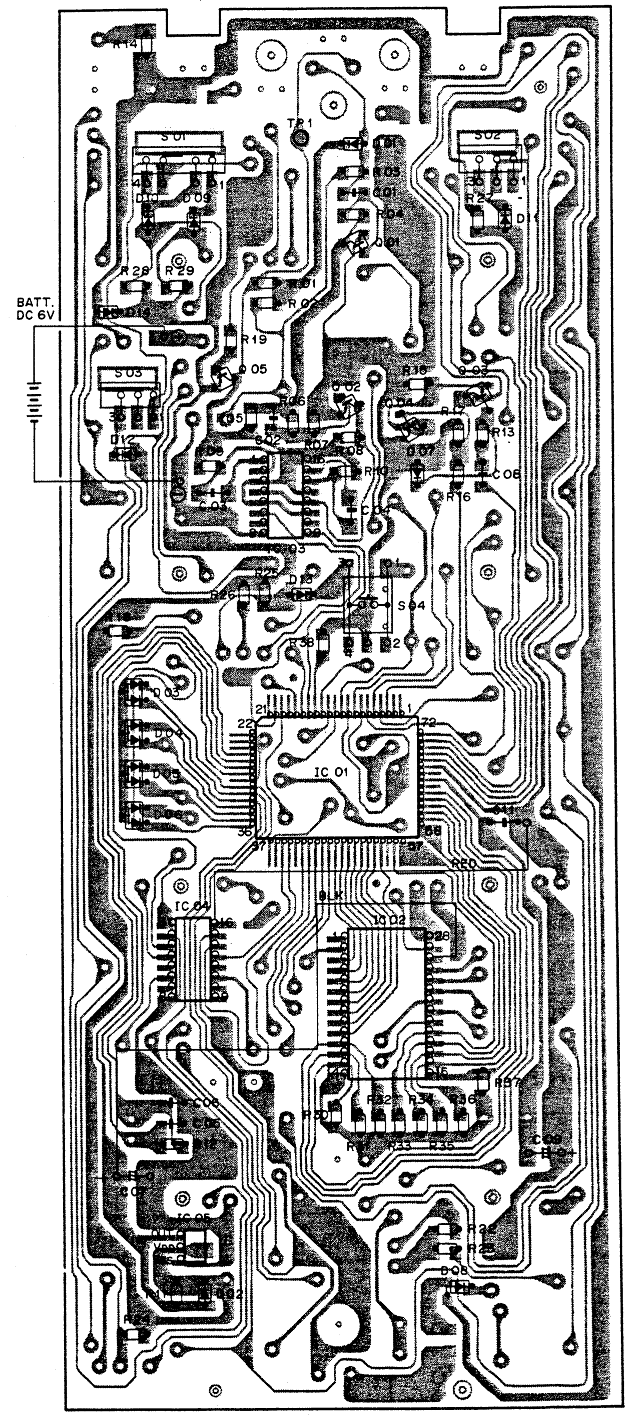
—▭— : Indicates a chip resistor.

—▮— : Indicates a chip capacitor.

⊠ : Indicates a chip transistor.

—▶|— : Indicates a chip diode.


IDE
LED 02
LED 01
IDE 01
C10
S1
S2
S3
S4
S5
S6
S7
S8
S9
S10
S13
S14
S11
S15
S16
S12
S17
S18
S19
S20
S21
S22
S23
S24
S25
S26
S27
S28
S29
S30
S31
S39
S40
S41
S35
S34
S36
S48
S49
S42
S46
S44
S43
S64
S51
S52
S53
S54
S55
S57
S58
S59
S60
S61
S73
S72
X01
S71
S67
S69
S68
S65
S77
S73
S76
S66
S75
S74
S70


BATT.
DC 6V
R14
TP1
S01
S02
D01
R03
C01
R04
Q01
D10
D09
D11
R28
R29
R01
R02
D14
R19
S03
Q05
D12
Q02
R18
Q03
R13
R06
C05
C02
R07
R08
R10
Q07
C08
R16
C04
C03
IC03
R25
R26
D13
S04
R38
D03
D04
D05
D06
IC 01
RE0
BLK
IC 04
IC 02
C06
R12
C07
IC 05
R30
R32
R34
R36
R31
R33
R35
R57
C09
R24
R23
D08
Q02

9. IC INFORMATION

PDG021

Terminal Functions

Terminal No.	Terminal name	I/O	Conditions	Terminal status	Remarks
1	WP	I	When requested	H	Sets the model to "H" when receiving order from IC801 (PDG020)
2	RMC/EC	I	(Set to "H" in advance.)	H	Switches the model NOW···"H" NEXT···"L"
3	CLK	O	When data is output	⎍⎍⎍	Serial clock output
4	DATA	O	When data is output	⎍⎍⎍	Serial data output
5	SOA	I	When VSX−9300S is used	L	When the terminal for model selection is VSX−7300 series, sets the model to "H"
6	SI	I	VSX−9300S and VSX−7300 series	L	Switches the tuner mode (J/$\overline{\text{Ex}}$)
7	RF MODU	O	TV ANT.···"VIDEO"	H	Switches the RF modulater power supply ON
8	ST	O	When data transfer is completed (BALANCE or TONE)	_↑⎍_	"STROB" output for IC167 (TC9154AP) and IC168 (TC9184P)
9	CE	O	When data transfer is completed	_↑⎍_	"STROB" output for IC101 (TC9164N)
10	SS	O	SIMULATED STEREO···"ON"	L	
11	POWER	O	POWER "ON"	H	POWER RELAY (RY−501) ···"ON"
12	REAR	O	REAR output relay is switched "ON"	H	REAR SP RELAY (RY−505) ···"ON"
13	SP−A	O	FRONT SP−A relay is switched "ON"	H	FRONT SP RELAY (RY−503) ···"ON"
14	SP−B	O	FRONT SP−B relay is switched "ON"	H	FRONT SP RELAY (RY−504) ···"ON"
15	D_0	I/O	When READY is set to "L"	⎍⎍⎍	Data terminal when transferring data mutually with IC801 (PDG020)
16	D_1				
17	D_2				
18	D_3				
19	D_4				
20	D_5				
21	D_6				
22	D_7				
23	READY	I/O	When REQ is set to "H"	L	The mode is set to "L" until finishing to read the data
24	ACT	I/O	When data transfer is completed	_↑‾	REQ will become "L"
25	REQ	O	During data transfer	H	Processing to send data
26	TUNED	I	When a broadcast is received	‾↓_	TUNER STOP signal input
27	A_0	I	Channel step AM9kHz FM50kHz	H	Channel step AM10kHz FM100kHz ···"L"
28	A_1	O			Not used
29	A_2	O	FM MODE (AUTO)	L	FM MODE (MONO) ···"H"
30	A_3	O	During data transfer	H	"CE" output for IC771 (LM7001)
31	NC	——			Not used

<table>
<tr><th>Terminal No.</th><th>Terminal name</th><th>I/O</th><th>Conditions</th><th>Terminal status</th><th>Remarks</th></tr>
<tr><td>32</td><td>Vss</td><td></td><td>GND</td><td></td><td></td></tr>
<tr><td>33</td><td>G_0</td><td>O</td><td>When data transfer is completed</td><td>⎍</td><td>"STROB" output for IC425 (IC9154AP)</td></tr>
<tr><td>34</td><td>G_1</td><td>O</td><td>DELAY TIME 15ms</td><td>H</td><td rowspan="3">DELAY TIME CONTROL</td></tr>
<tr><td>35</td><td>G_2</td><td>O</td><td>DELAY TIME 20ms</td><td>H</td></tr>
<tr><td>36</td><td>G_3</td><td>O</td><td>DELAY TIME 30ms</td><td>H</td></tr>
<tr><td>37</td><td>H_0</td><td>O</td><td>VCR2, VDP/CDV</td><td>L</td><td>VIDEO INPUT SELECTOR</td></tr>
<tr><td>38</td><td>H_1</td><td>O</td><td>SIMULATED</td><td>L</td><td rowspan="2">SURROUND MODE</td></tr>
<tr><td>39</td><td>H_2</td><td>O</td><td>STADIUM</td><td>L</td></tr>
<tr><td>40</td><td>H_3</td><td>O</td><td>When data transfer is completed</td><td>⎍</td><td>"STROB" output for IC1130 (CXD1067P)</td></tr>
<tr><td>41</td><td>I_0</td><td>O</td><td>During TUNER output MUTE</td><td>H</td><td></td></tr>
<tr><td>42</td><td>I_1</td><td>O</td><td>VCR2, VDP/CDV</td><td>L</td><td>VIDEO INPUT SELECTOR</td></tr>
<tr><td>43</td><td>I_2</td><td>O</td><td>VR IND (D761) light up</td><td>H</td><td></td></tr>
<tr><td>44</td><td>I_3</td><td>O</td><td>When data transfer is completed</td><td>⎍</td><td>"STROB" output IC101, IC102(TC9164N) and IC103 (TC9162N)</td></tr>
<tr><td>45</td><td>UP</td><td rowspan="2">O</td><td rowspan="2">When VR MOTOR is operated</td><td rowspan="2"></td><td rowspan="2"><table><tr><th>IC391 / VR</th><th>45Pin</th><th>46Pin</th></tr><tr><td>VR UP</td><td>H</td><td>L</td></tr><tr><td>VR DOWN</td><td>L</td><td>H</td></tr></table></td></tr>
<tr><td>46</td><td>DOWN</td></tr>
<tr><td>47</td><td>J_2</td><td rowspan="10">O</td><td rowspan="10">VIDEO signal control</td><td rowspan="10"></td><td rowspan="10">Refer to Image diagram (VIDEO)</td></tr>
<tr><td>48</td><td>J_3</td></tr>
<tr><td>49</td><td>K_0</td></tr>
<tr><td>50</td><td>K_1</td></tr>
<tr><td>51</td><td>K_2</td></tr>
<tr><td>52</td><td>K_3</td></tr>
<tr><td>53</td><td>L_0</td></tr>
<tr><td>54</td><td>L_1</td></tr>
<tr><td>55</td><td>L_2</td></tr>
<tr><td>56</td><td>L_3</td></tr>
<tr><td>57</td><td>V_L</td><td>—</td><td></td><td></td><td>Set GND in advance</td></tr>
<tr><td>58</td><td>INT</td><td>I</td><td></td><td></td><td>Set GND in advance</td></tr>
<tr><td>59</td><td>XTAL</td><td>—</td><td rowspan="2">Connect ceramic resonator of 4.19MHz</td><td rowspan="2"></td><td rowspan="2"></td></tr>
<tr><td>60</td><td>EXTAL</td><td>I</td></tr>
<tr><td>61</td><td>RST</td><td>I</td><td>When Power is switched "ON"</td><td>⊔</td><td></td></tr>
<tr><td>62</td><td>Y_0</td><td>O</td><td>REC ENHANCER "ON"</td><td>H</td><td></td></tr>
<tr><td>63</td><td>Y_1</td><td>O</td><td></td><td></td><td>Not used (open)</td></tr>
<tr><td>64</td><td>V_{DD}</td><td></td><td></td><td></td><td>+5V</td></tr>
</table>

PDG020

Terminal Functions

Terminal No.	Terminal name	I/O	Conditions	Terminal status	Remarks	
1	S_4	O	Power "ON" or "STAND-BY"	⎍⎍	Control of FL indicator segments (S_4 to S_{21})	S_4
2	S_5					S_5
3	S_6					S_6
4	S_7					S_7
5	S_8					S_{11}
6	S_9					S_8
7	S_{10}					S_{21}
8	S_{11}					S_{20}
9	S_{12}					S_{19}
10	S_{13}					S_{18}
11	S_{14}					S_{17}
12	S_{15}					S_{16}
13	S_{16}					S_{15}
14	S_{17}					S_{14}
15	S_{18}					S_{13}
16	S_{19}					S_{12}
17	S_{20}					S_{10}
18	S_{21}					S_9
19	T_9	O	Power "ON" or "STAND-BY"	⎍⎍	Control of FL indicator grid (T_0-T_9)	1G
20	T_8					2G
21	T_7					3G
22	T_6					4G
23	T_5					5G
24	T_4					6G
25	T_3					7G
26	T_2					8G
27	T_1					9G
28	T_0					10G
29	INT	I	GND		Not used	
30	XTAL	—	Cermic oscillator (4.19MHz) connection	∿∿		

Terminal No.	Terminal name	I/O	Conditions	Terminal status	Remarks	
31	EXTAL	I	Ceramic resonator (4.19MHz)	∿∿		
32	RST	I	Power "OFF" to "ON"	L	RESET	
33	NC	—	(Open)	—	Not used	
34	V_{DD}		Power "ON" or "STAND-BY"	5V	Pin for application of 5V power	
35	AD0	I	Analog voltage input for driving level meter	∿∿	Level indicator control	Front LcH
36	AD1					Front RcH
37	AD2					Rear LcH
38	AD3					Rear RcH
39	AD4					Center
40	B_1	I	During FM stereo reception	L		
41	B_2	I	When tuner section is receiving in auto tuning mode		Reception at freqency when goes to "L" during searching in auto tuning mode	
42	B_3	I	Memory number 30 stations	H	Number of memory channels for tuner sections is set to 30 or 10 stations	
			Memory number 10 stations	L		
43	NC	—	(Open)	—	Not used	
44	SC	O	Not used	⎍⎍	CLOCK output	
45	SO	O		⎍⎍	DATA output	
46	SI	I	GND	L	"SURROUND" can not be turned ON/OFF	
			+5V	H		
47	READY	I/O	When REQ is set to "H"	L	The mode is set to "L" until finishing to read the data	
48	ACT	I/O	When data transfer is completed	↑	REQ will become "L"	
49	REQ OUT	O	During data transfer	H	Processing to send data	
50	REQ IN	I	When requested	H	Sets the model to "H" when receiving order from IC391 (PDG021) .	
51	F_0	I	During control key operation	⎍⎍	Key matrix input	
52	F_1					
53	F_2					
54	F_3					
55	E_0					
56	E_1					
57	E_2					
58	E_3					
59	PY0	O	When the IC391 (PDG021) is reset	⊔		
60	PWM	O	(Open)		Not used	

Terminal No.	Terminal name	I/O	Conditions	Terminal status	Remarks	
61	WP	I	AC pulse (50/60Hz) input		Back−up state when no AC pulse input	
62	RMC	I	During remote control reception	⊓⊔⊓	Input terminal for remote control signal	
63	D_0	I/O	When READY is set to "L"	⊓⊔⊓	Data terminal when transferring data mutually with IC391 (PDG021)	
64	D_1					
65	D_2					
66	D_3					
67	D_4					
68	D_5					
69	D_6					
70	D_7					
71	Vss		GND	—		
72	TX	—	(Open)	—	Not used	
73	NC	—	(Open)	—	Not used	
74	TEX	I	5V		Application of STAND−BY power (5V)	
75	V_{RFF}		Back−up		Application of STAND−BY power (5V)	
76	V_{FDP}		Power "ON"	−30V	Power supply for FL indicator control	
77	S_0	O	Power "ON" or "STAND−BY"	⊓⊔⊓	Control of FL indicator segments (S_0 to S_3)	S_0
78	S_1					S_1
79	S_2					S_2
80	S_3					S_3

10. CIRCUIT DESCRIPTIONS

• DOLBY SURROUND PRO-LOGIC

In a conventional Dolby surround circuit, FRONT signals (LEFT and RIGHT) are output only by adjusting both BALANCE as shown in Figure 10−1. Therefore, only REAR signal (SURROUND) performed DOLBY SURROUND processing.

A detailed sound field was not easy to reproduce, because the L (R) signal passes the SURROUND circuit.

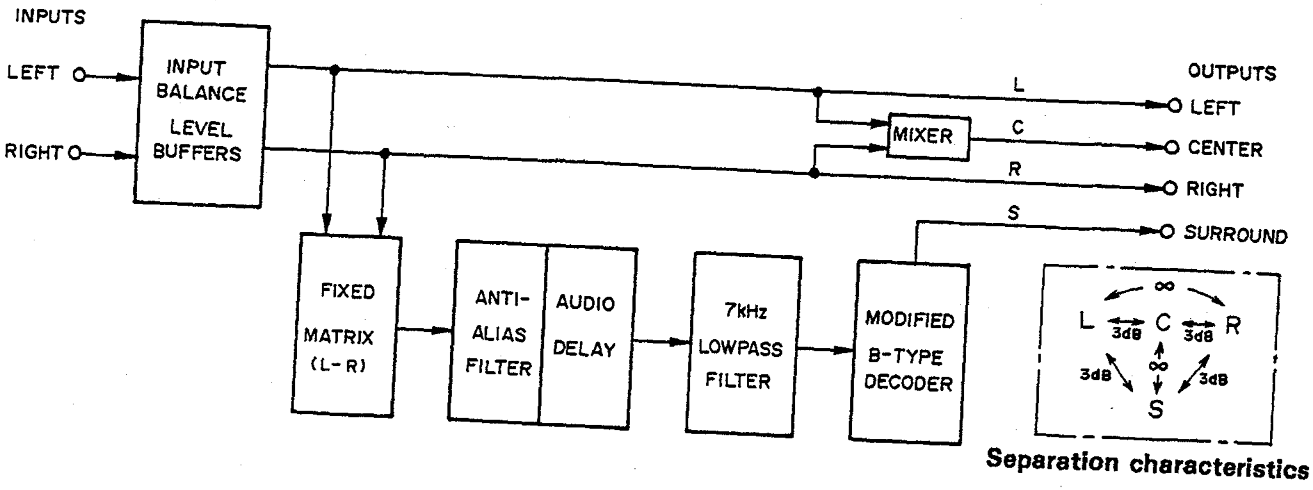

INPUTS
LEFT
RIGHT
INPUT
BALANCE
LEVEL
BUFFERS
MIXER
L
C
R
S
OUTPUTS
LEFT
CENTER
RIGHT
SURROUND
FIXED
MATRIX
(L−R)
ANTI-
ALIAS
FILTER
AUDIO
DELAY
7kHz
LOWPASS
FILTER
MODIFIED
B-TYPE
DECODER
∞
L
3dB
C
3dB
R
3dB
∞
3dB
S
Separation characteristics

Figure 10−1. Block diagram of conventional Dolby surround circuit

The DOLBY SURROUND PRO−LOGIC controls the FRONT and REAR signals together by adding ADAPTIVE MATRIX and CENTER MODE CONTROL CIRCUIT to the conventional Dolby surround circuit as shown in Figure 10−2.

The ADAPTIVE MATRIX circuit improved separation between LEFT, CENTER, RIGHT and SURROUND.

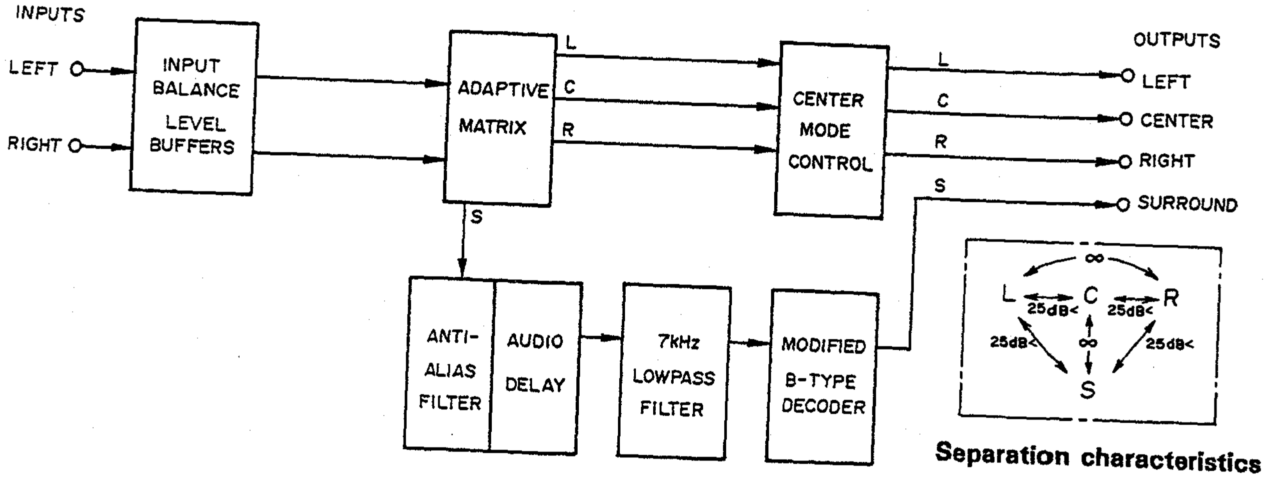

INPUTS
LEFT
RIGHT
INPUT
BALANCE
LEVEL
BUFFERS
ADAPTIVE
MATRIX
L
C
R
S
CENTER
MODE
CONTROL
OUTPUTS
LEFT
CENTER
RIGHT
SURROUND
ANTI-
ALIAS
FILTER
AUDIO
DELAY
7kHz
LOWPASS
FILTER
MODIFIED
B-TYPE
DECODER
∞
L
25dB<
C
25dB<
R
25dB<
∞
25dB<
S
Separation characteristics

Figure 10−2. Block diagram of DOLBY SURROUND PRO−LOGIC circuit

• ADAPTIVE MATRIX

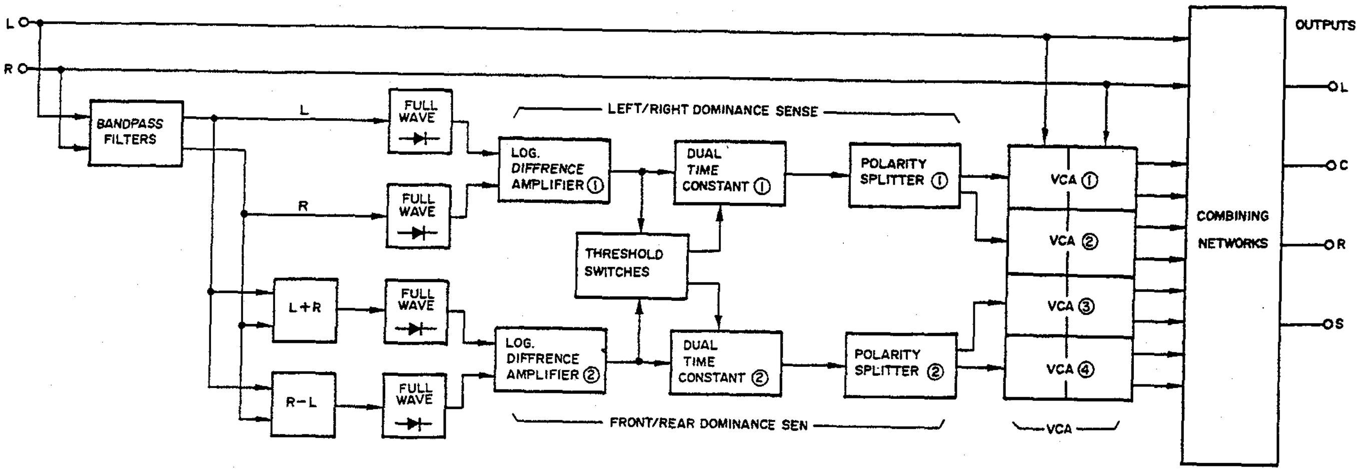

L
R
BANDPASS FILTERS
L
R
L+R
R−L
FULL WAVE
FULL WAVE
FULL WAVE
FULL WAVE
LEFT/RIGHT DOMINANCE SENSE
LOG. DIFFRENCE AMPLIFIER ①
LOG. DIFFRENCE AMPLIFIER ②
THRESHOLD SWITCHES
DUAL TIME CONSTANT ①
DUAL TIME CONSTANT ②
POLARITY SPLITTER ①
POLARITY SPLITTER ②
FRONT/REAR DOMINANCE SEN
VCA ①
VCA ②
VCA ③
VCA ④
VCA
COMBINING NETWORKS
OUTPUTS
L
C
R
S

Figure 10−3. Block diagram of adaptive matrix

The configuration is as shown in Figure 10−3.

This circuit works to convert 2 CH AUDIO signal (L CH and R CH) which has been processed by Dolby encoding into a 4 CH signal (L, R and Center CHs of FRONT and Surround CH of REAR).

1. Picks up only signals from 150Hz to 5kHz from the band−pass filter.
2. Performs full−wave rectification for the sound signal picked up from the band−pass filter with the full−wave rectifier.
3. The signals that undergo full−wave rectification are processedby logarighmic compression and comparison with the LOG−difference amplifier.
4. Observes DC voltage of ① and ② of the LOG−difference amplifier output at the points Ⓒ and Ⓓ of the threshold switch (see Figure 10−4). When the DC voltage value becomes 7.8V and larger or 7.0V and less, Ⓔ of the threshold switch will be set to "L" (approx. 0.6V) and Ⓕ will be set to "H" (approx. 14V).

   The threshold voltage 7.8V and 7.0V which set Ⓔ to "L" and Ⓕ to "H" are decided by the reference voltage indicated in Ⓐ and Ⓑ of Figure 10−4.
5. The dual time−constant switches the variable speed of output voltage of the LOG−difference amplifier which becomes the control voltage of VCA.

   This is performed for natural reproduction of sound field.

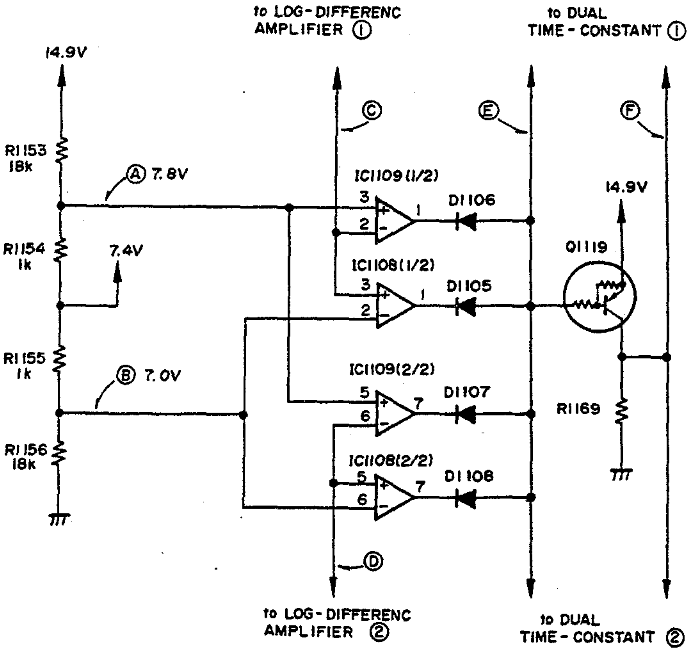

to LOG-DIFFERENC AMPLIFIER ①
to DUAL TIME-CONSTANT ①
14.9V
R1153 18k
R1154 1k
R1155 1k
R1156 18k
Ⓐ 7.8V
7.4V
Ⓑ 7.0V
Ⓒ
Ⓔ
Ⓕ
IC1109 (1/2)
IC1108 (1/2)
IC1109 (2/2)
IC1108 (2/2)
D1106
D1105
D1107
D1108
14.9V
Q1119
R1169
Ⓓ
to LOG-DIFFERENC AMPLIFIER ②
to DUAL TIME-CONSTANT ②

Figure 10−4. Threshold switch

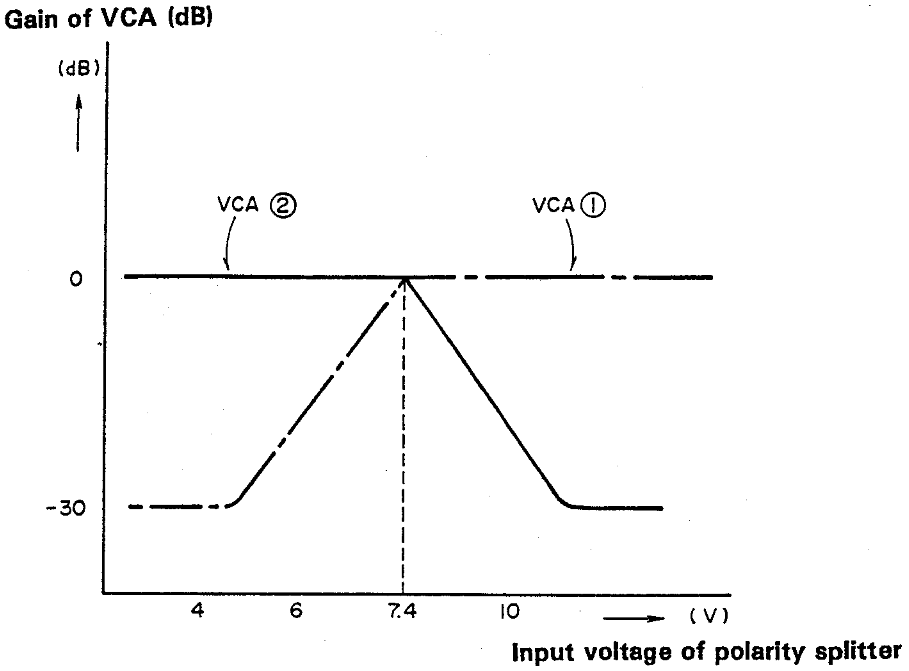


Figure 10−5. VCA (1) and (2) characteristics

6. The polarity splitter controls VCA ① and VCA ② to achieve opposite characteristics as shown in Figure 10−5.
   The voltage (7.4V) where the gains of both VCA ① and VCA ② become 0dB indicates that at this point the voltage value is the same as the reference voltage (7.4V) which is output from Pin3 (COM terminal) of VCA.
7. Control the signal level to be input to the combining network for deciding respective CHs (L, R, Center and Surround CHs) level with VCA ① to VCA ④.
8. The combining network produces the output of respective CHs (L, R, Center and Surround CHs) by adding or subtracting the signals passed through VCA ① to VCA ④ and the signals input directly to the combining network.
9. Selects the positions of WIDE, NORMAL and PHANTOM by the center mode control.
   In NORMAL position, the signals being cut the range than 110Hz are output to the Center CH through the high−pass filter (HPF) provided at IC1124−1/2 (M5218). Simultaneously, the frequencies lower than 110Hz are picked up from the low−pass filter (LPF) provided at IC1124−1/2 (M5218) and mixed into FRONT L and R CHs.
   In PHANTOM position, the signals for Center CH are mixed into FRONT L and R CHs in a form specifying the level to −3dB.
   In WIDE position, the signals are output to the Center CH output as they are.

10. NOISE SEQUENCER

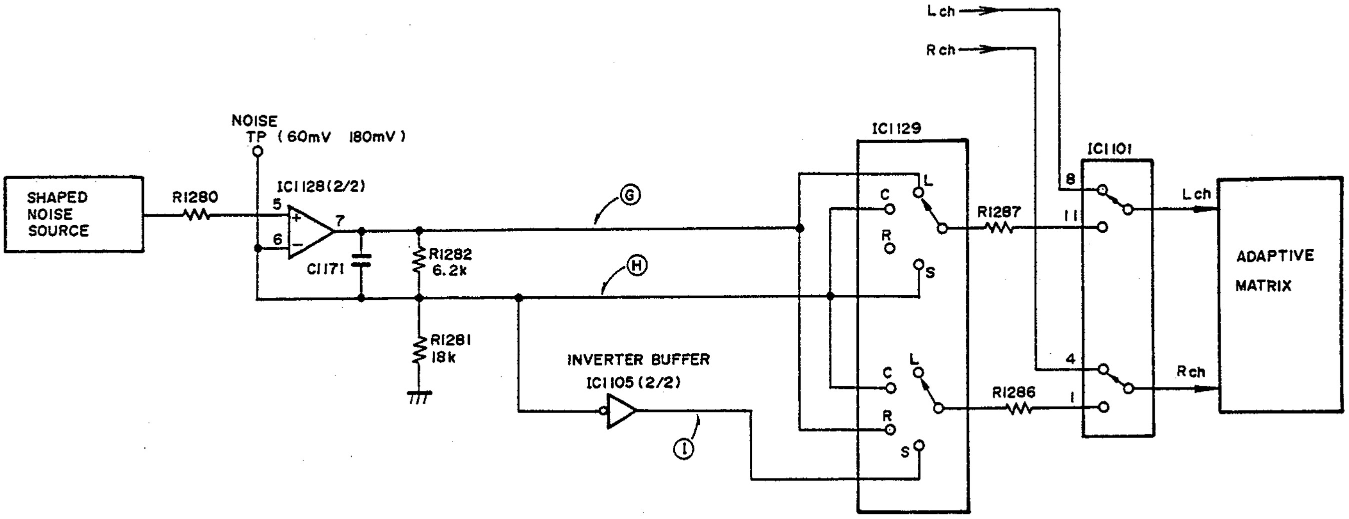

Lch
Rch
NOISE
TP (60mV 180mV)
IC1129
IC1101
SHAPED NOISE SOURCE
R1280
IC1128(2/2)
5
+
6
−
7
C1171
R1282
6.2k
R1281
18k
Ⓖ
Ⓗ
INVERTER BUFFER
IC1105 (2/2)
Ⓘ
C
L
R
S
R1287
R1286
8
11
4
1
Lch
Rch
ADAPTIVE
MATRIX

Figure 10−6. Block diagram of NOISE SEQUENCER

The NOISE TP terminal has a noise output from 60mV to 180mV.
In Figure 10−6, when setting the level of Ⓖ to 0dB, the level of Ⓗ will become −3dB.
The noise output at point Ⓘ is −3dB, same as at point Ⓗ, however, with reverse phase than Ⓗ. The output is switched in intervals of approx. 2seconds in sequence of L → C → R → S by IC1129 (TC4052). This operation will be repeated while the test tone switch is ON.

11. FOR VSX-7300S/KUC, SD/G AND VSX-7300/KUC TYPES.

NOTES:

- *Parts without part number cannot be supplied.*
- *The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.*
- *For your parts Stock Control, the fast moving items are indicated with the marks ★★ and★.*
  ★★ GENERALLY MOVES FASTER THAN★
  This classification shall be adjusted by each distributor because it depends on model number, temperature, humidity, etc.
- *Parts marked by "◉" are not always kept in stock. Their delivery time may be longer than usual or they may be unavailable.*

CONTRAST OF MISCELLANEOUS PARTS.

The VSX-7300S/KUC SD/G and VSX-7300/KUC types are the same as the VSX-9300S/KUC type with the exception of the following sections.

Mark	Symbol & Description	Part No.				Remarks
		VSX-9300S/ KUC type	VSX-7300S/ KUC type	VSX-7300S/ SD/G type	VSX-7300/ KUC type	
	Pro logic assembly	AWX1016	....	....	....	
	AF assembly	AWZ1961	AWZ1971	AWZ1971	AWZ1971	
	VIDEO/SUR/CONTROL assembly	AWZ1965	AWZ1973	AWZ1973	AWZ1973	
	Tuner assembly	AWZ1966	AWZ1966	AWZ1966	AWZ1966	
	Front control A assembly	AWZ1967	AWZ1975	AWZ1975	AWZ1975	
	Headphone assembly	Non supply	Non supply	Non supply	Non supply	
	Motor-volume assembly	Non supply	Non supply	Non supply	Non supply	
	Terminal assembly	Non supply	Non supply	Non supply	Non supply	
	Front control B assembly	Non supply	Non supply	Non supply	Non supply	
	Meter amp assembly	Non supply	Non supply	Non supply	Non supply	
	Rear amp assembly	Non supply	Non supply	Non supply	Non supply	
	Vol IND assembly	Non supply	Non supply	Non supply	Non supply	
⚠ ★	Power transformer (AC120V,T1)	ATS1144	ATS1144	....	ATS1144	
⚠ ★	Power transformer (AC110V,120V-127V,220V, 240V,T1)	....	....	ATS1145	....	
⚠★★	Fuse (10A/125V,FU1)	AEK-310	AEK-310	....	AEK-310	
⚠★★	Fuse (6A/125V,FU1,FU2)	....	....	AEK-109	....	
⚠★★	Line voltage selector switch (AC110V,120V-127V,220V, 240V,S3)	....	....	AKX-507	....	
⚠★★	Slide switch (S4)	....	....	ASH-004	....	
⚠★★	Line voltage selector switch (S2)	....	....	AKX1004	....	
⚠	Fuse holder	....	....	AKR-032	....	
	Power cord	ADG1031	ADG1031	ADG1015	ADG1031	
	Hinge knob (*1-*5)	AAD1394	AAD1406	AAD1406	AAD1406	
	Hinge knob (*6-*0)	AAD1395	AAD1406	AAD1406	AAD1406	
	Hinge knob (OFF,STADIUM, SIMULATED-SURROUND,DOLBY SURROUND)	AAD1396	AAD1397	AAD1397	AAD1397	

Mark	Symbol & Description	Part No.				Remarks
		VSX-9300S/ KUC type	VSX-7300S/ KUC type	VSX-7300S/ SD/G type	VSX-7300/ KUC type	
	Insulator assembly	AMR1434	AMR1350	AMR1350	AMR1350	
	Insulator assembly	AMR1435	AMR1353	AMR1353	AMR1353	
	Front panel	ANB1205	ANB1206	ANB1206	ANB1206	
	Packing case	AHD1437	AHD1440	AHD1439	AHD1438	
	Operating instruction (English)	ARB1112	ARB1115	ARB1115	ARB1112	
	Operating instruction (Spanish)	……………	……………	ARC1089	……………	
	Screw	……………	……………	VMZ26P040FZK	……………	
	Remote control unit	AXD1055	AXD1055	AXD1055	AXD1056	
	Spacer	……………	……………	AHB1006	……………	
	Template	AAK1439	AAK1439	AAK1439	……………	

NOTES:

- *Parts without part number cannot be supplied.*
- *Parts marked by "◉" are not always kept in stock. Their delivery time may be longer than usual or they may be unavailable.*
- *The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.*
- *For your parts Stock Control, the fast moving items are indicated with the marks ★★ and ★.*
  ★★ GENERALLY MOVES FASTER THAN ★
  This classification shall be adjusted by each distributor because it depends on model number, temperature, humidity, etc.

AF assembly

The AF assembly (AWZ1971) is the same as the AF assembly (AWZ1961) with the exception of the following sections.

Mark	Symbol & Description	Part No.		Remarks
		AWZ1961 (VSX-9300S/KUC)	AWZ1971 (VSX-7300S/KUC,SD/G, VSX-7300/KUC)	
	C189	……………	CEAS100M25	
	R191,R192	……………	RD1/8PM223J	
	R193,R194,R196	……………	RD1/8PM102J	
	R195	……………	RD1/8PM273J	

VIDEO/SUR/CONTROL assembly

The VIDEO/SUR/CONTROL assembly (AWZ1973) is the same as the VIDEO/SUR/CONTROL assembly (AWZ1965) with the exception of the following sections.

Mark	Symbol & Description	Part No.		Remarks
		AWZ1965 (VSX-9300S/KUC)	AWZ1973 (VSX-7300S/KUC,SD/G, VSX-7300/KUC)	
	C444,C445	CEAS2R2M50	……………	
	R458	RD1/8PM392J	……………	
	R460	RD1/8PM102J	……………	
	R515	RD1/8PM223J	……………	

Front control A assembly

The Front control A assembly (AWZ1975) is the same as the Front control A assembly (AWZ1967) with the exception of the following sections.

Mark	Symbol & Description	Part No.		Remarks
		AWZ1967 (VSX-9300S/KUC)	AWZ1975 (VSX-7300S/KUC,SD/G, VSX-7300/KUC)	
★★	S855,S856	ASG-711	....	
	R834	....	RA5S103J	

Motor-volume assembly

The Motor-volume assembly (VSX-7300S/KUC,SD/G,VSX-7300/KUC) are the same as the Motor-volume assembly (VSX-9300S/KUC) with the exception of the following sections.

Mark	Symbol & Description	Part No.		Remarks
		VSX-9300S/ KUC type	VSX-7300S/KUC, SD/G,VSX-7300/ KUC types	
★	VR671 Variable resistor with motor	ACX1016	ACX1015	

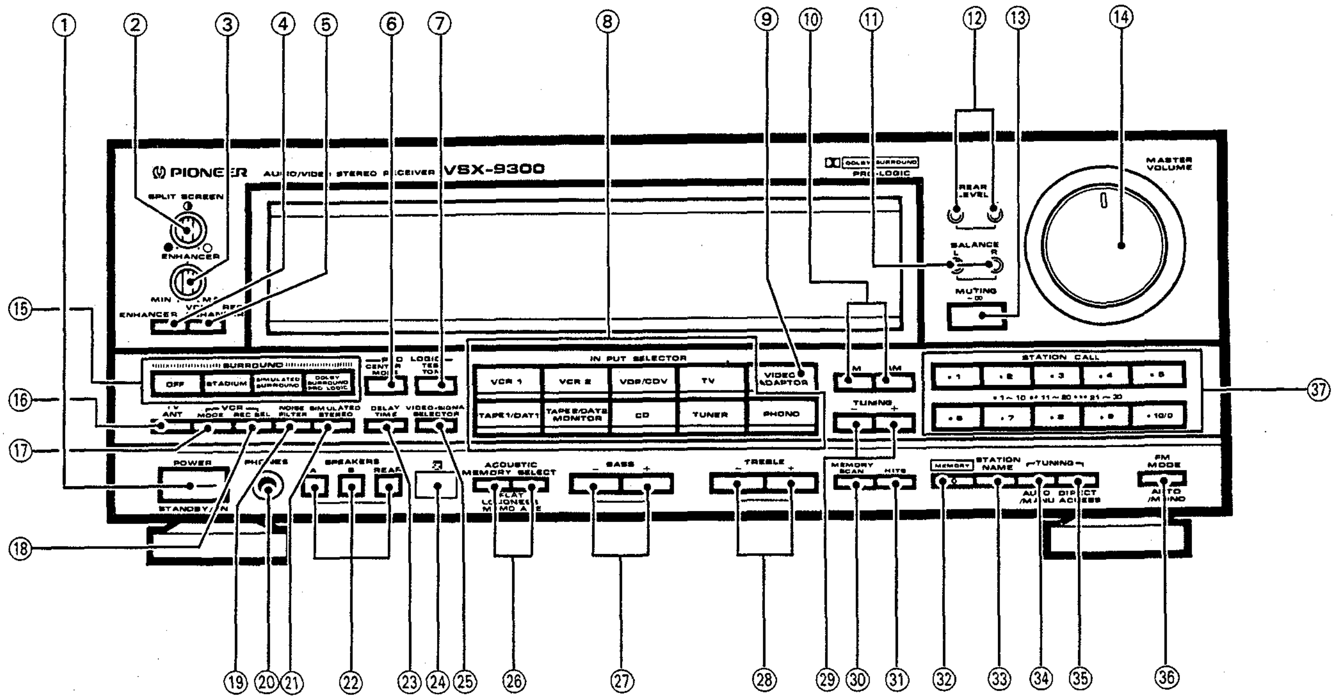
Meter amp assembly

The Meter amp assembly (VSX-7300S/KUC,SD/G,VSX-7300/KUC) are the same as the Meter assembly (VSX-9300S/KUC) with the exception of the following sections.

Mark	Symbol & Description	Part No.		Remarks
		VSX-9300S/ KUC type	VSX-7300S/KUC, SD/G,VSX-7300/ KUC types	
	C636	....	CEAS010M50	
	R635	RD1/8PM684J	....	
	R661,R662	....	RD1/8PM105J	
	R669	....	RD1/8PM274J	

12. PANEL FACILITIES

(VSX-9300S) ⑥, ⑦. . . VSX-9300S only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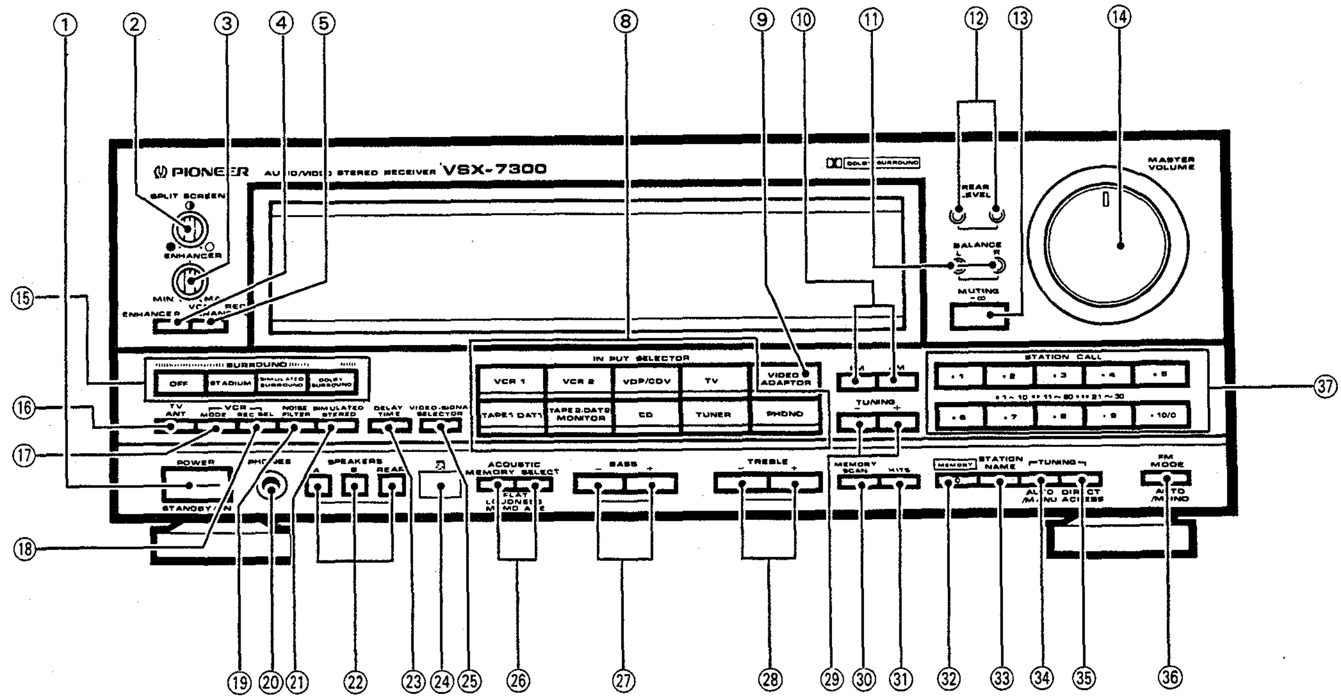
PIONEER
AUDIO/VIDEO STEREO RECEIVER VSX-9300
DOLBY SURROUND PRO-LOGIC
SPLIT SCREEN
ENHANCER
MIN MAX
ENHANCER VCR REC
MASTER VOLUME
REAR LEVEL
BALANCE L R
MUTING −∞
SURROUND
OFF
STADIUM
SIMULATED SURROUND
DOLBY SURROUND PRO LOGIC
PRO LOGIC
CENTER MODE
TEST TONE
INPUT SELECTOR
VCR 1
VCR 2
VDP/CDV
TV
VIDEO ADAPTOR
TAPE1/DAT1
TAPE2/DAT2 MONITOR
CD
TUNER
PHONO
FM
AM
TUNING − +
STATION CALL
1
2
3
4
5
6
7
8
9
10/0
TV ANT
VCR MODE REC SEL
NOISE FILTER
SIMULATED STEREO
DELAY TIME
VIDEO-SIGNAL SELECTOR
POWER
STANDBY/ON
PHONES
SPEAKERS A B REAR
ACOUSTIC MEMORY SELECT
FLAT
LOUDNESS
MEMO A B
BASS − +
TREBLE − +
MEMORY SCAN
HITS
MEMORY
STATION NAME
TUNING
AUTO DIRECT
/MANU ACCESS
FM MODE
AUTO /MONO

(VSX-7300)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PIONEER
AUDIO/VIDEO STEREO RECEIVER VSX-7300
DOLBY SURROUND
SPLIT SCREEN
ENHANCER
MIN MAX
ENHANCER VCR REC
MASTER VOLUME
REAR LEVEL
BALANCE L R
MUTING −∞
SURROUND
OFF
STADIUM
SIMULATED SURROUND
DOLBY SURROUND
INPUT SELECTOR
VCR 1
VCR 2
VDP/CDV
TV
VIDEO ADAPTOR
TAPE1 DAT1
TAPE2 DAT2 MONITOR
CD
TUNER
PHONO
FM
AM
TUNING − +
STATION CALL
1
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8
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10/0
TV ANT
VCR MODE REC SEL
NOISE FILTER
SIMULATED STEREO
DELAY TIME
VIDEO-SIGNAL SELECTOR
POWER
STANDBY/ON
PHONES
SPEAKERS A B REAR
ACOUSTIC MEMORY SELECT
FLAT
LOUDNESS
MEMO A B
BASS − +
TREBLE − +
MEMORY SCAN
HITS
MEMORY
STATION NAME
TUNING
AUTO DIRECT
/MANU ACCESS
FM MODE
AUTO /MONO

① POWER STANDBY/ON switch

When this switch is pressed, power is supplied to the unit. Press the switch again to turn power off

[Timer ON/OFF possible]

When the unit is switched ON, ON/OFF control can be performed by means of the optional timer.

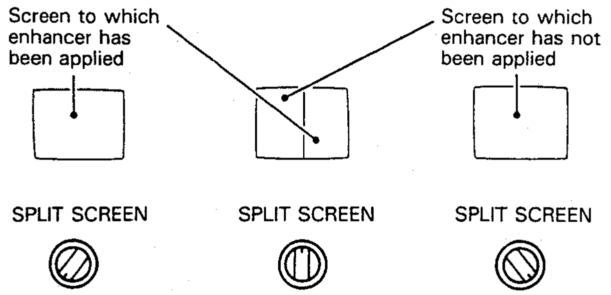
NOTE:

When the power is initially turned ON, muting will be applied to prevent sound from being output for about 5 seconds.

② SPLIT SCREEN control

This spilt screen function can be used when the ENHANCER switch is on.

This control allows you to freely control the area of enhanced picture (on right side of screen) and original picture (non-enhanced, on left side of screen) by means of a vertical line dividing the screen into two sections.


Screen to which enhancer has been applied
Screen to which enhancer has not been applied
SPLIT SCREEN
SPLIT SCREEN
SPLIT SCREEN

NOTE:

This line is not output from the VCR (VCR1 and VCR2) VIDEO OUT jacks. As a result, the split screen image is not recorded; the recorded image will be entirely that produced by the enhancer function.

③ ENHANCER control

When performing tape copying with a VCR, some deterioration in image quality occurs normally. This control allows compensation for this deterioration in image quality by emphasizing image detail.

NOTE:

The ENHANCER control functions to suppress image deterioration, but will not improve image quality beyound its original state.

④ ENHANCER switch

Press when performing video copying with added video enhancer effets. When the switch is pressed, the monitored video image will be the split screen picture.

Using the SPLIT SCREEN function will enable you to compare the enhanced and original (unenhanced) images.

⑤ VCR1 REC ENHANCER switch

Turn this switch ON to record on the VCR connected to the VCR 1 jacks the video image from VCR 2 or VDP with enhancement applied using the ENHANCER control knob. At this time, the enhancer is turned off for the monitor and VCR2 REC OUT.

NOTE:

- *The VCR1 REC SELECTOR must be on for the VCR1 REC ENHANCER switch to operate.*

⑥ PRO LOGIC CENTER MODE switch (VSX-9300S)

Switches between the four DOLBY SURROUND PRO LOGIC center channel settings. The setting changes in the order listed below each time you press the switch.

NORMAL — Use this setting when a small enclosure center channel speaker incapable of reproducing frequencies below 100Hz is connected.

WIDE — Use this setting when a large enclosure center channel speaker capable of reproducing frequencies below 100Hz is connected.

PHANTOM — Use this setting when no center channel speaker is connected.

OFF — Select this setting before adjusting surround balance. Use a mono (AM radio, etc.) signal and adjust the surround balance control so that volume is minimized from the left, right and rear (surround) speakers.

NOTE:

If no center speaker is used, then mono signals and center channel signal components will not be reproduced at positions other than the PHANTOM position.

⑦ PRO LOGIC TEST TONE switch (VSX-9300S)

Only operates when the DOLBY SURROUND PRO LOGIC surround mode is selected. When the switch is turned ON, "TEST" appears on the central display and a test tone approximately two seconds in duration is generated in the left, center, right and surround speaker channels in succession. Adjust the speaker level controls so that all speakers sound equally loud from the listening position for the optimum surround effect.

NOTE:

Set the center speaker volume level using the amplifier used to drive the center speaker.

⑧ Audio/Video INPUT SELECTOR switches

VCR1: Press when performing playback on a VCR unit.

VCR2: Press when performing playback on a second VCR unit.

VDP/CDV: Press when performing playback on a video disc player (VDP) or CDV player.

TV: Press to watch TV broadcasts from the TV tuner connected to the rear panel TV terminals.

TAPE 1/DAT 1: Press when performing playback on a DAT or tape deck.

TAPE 2/DAT 2 MONITOR: Press when performing playback on a second tape deck and when monitoring recording.

CD: Press when playing compact discs on a CD player.

TUNER: Press when listening to radio broadcasts.

PHONO: Press when playing records on turntable.

⑨ VIDEO ADAPTOR switch

Press when using a video adaptor component connected to the rear panel VIDEO ADAPTOR terminals. An indicator on the display section lights when this switch is set to ON.

⑩ BAND selector switches

FM: Press for FM reception.

AM: Press for AM reception.

⑪ BALANCE switches

Use to adjust the sound volume balance between left and right speakers.

L: Press to decrease the sound on the right side.

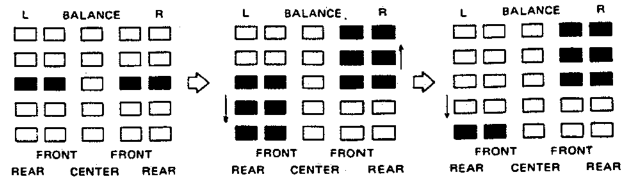
R: Press to decrease the sound on the left side.

Press L and R together to bring the volume balance back to center.

NOTE:

The left-right sound volume balance cannot be adjusted independently on the front and surround rear speakers.

Exanple: If press and keep the "R" switch.



⑫ REAR LEVEL (–, +) switches

Operate only when the surround mode is on.

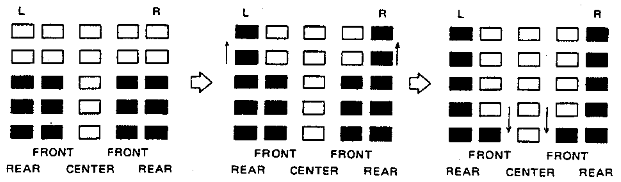
These switches are used to preset the sound level difference between the front and surround speakers. In this way, after presetting the difference, the overall volume of the front and surround rear speakers can be changed using the MASTER VOLUME control, while still maintaining the sound volume differential.

– : Surround rear speaker volume is reduced.

+ : Surround rear speaker volume is increasd.

To reset press − and + together to restore front and surround to the default volume balance setting.

Exanple: If press and keep the "+" switch.



⑬ MUTING switch

Press to temporaliry cut off the sound volume. The display section MUTING indicator will flash. When pressed agein, the sound will return to its previous level.

⑭ MASTER VOLUME control

Use to simultaneously adjust the sound volume from the front and surrond speakers.

⑮ SURROUND Mode Selector Switches

OFF:

To cancel the surround function.

STADIUM:

Ideal for sports broadcasts, etc.

SIMULATED SURROUND:

Gives concert-hall presence to monaural sound (AM, TV, etc.).

DOLBY SURROUND PRO LOGIC (VSX-9300S)

DOLBY SURROUND (VSX-7300)

Select this setting when watching video tapes or video discs bearing the DD DOLBY STEREO or DD DOLBY SURROUND mark.

⑯ TV ANT (VIDEO/TV) selector switch

This switch can be used in place of the TV ANT switch on the RF Modulator JA-RF5 (sold separetely). This is effective only when the JA-RF5's TV ANT switch is set to the VIDEO position. For example:

In VIDEO mode (TV-ANT indicator in the display section goes out):

Allows you to use video components connected to the receiver.

In TV mode (TV-ANT indicator in the display section lights):

Connects the TV antenna, thus allowing you to view normal TV broadcasts. The TV mode is selected when the receiver's power is off.

NOTE:

- *When in the VIDEO mode, no sound will be produced from the TV set's speakers. Listen using the speakers connected to the receiver.*
- *Noise may be produced if the TV set's volume control is turned up. Turn down the set's volume control when listening.*
- *This switch functions only when the TV ANT selector switch on the RF Modulator is set to "VIDEO".*
- *This is set to VIDEO when the power is turned on.*

⑰ VCR MODE switch

Toggles the VCR 1 signal between mono and stereo. It operates both during playback and during recording.

⑱ VCR1 REC SELECTOR switch

Use this switch to select the VCR 1 copy mode independent of the INPUT SELECTOR switch setting. Each time you press it the unit switches between the following three settings. The current setting is shown on the central display section.

VCR2→VCR1 → VDP/CDV→VCR1 → OFF

NOTE:

At the OFF position, the video source selected by the INPUT SELECTOR is output at the REC terminal.

⑲ VCR NOISE FILTER switch

If tape hiss is noticeable while performing playback of video cassette tapes, press this switch to reduce the noise.

After pressing this switch, "VCR NOISE FILTER" will appear on the display panel.

NOTE:

- *This switch can be used when either VCR1 or VCR2 function switches is selected.*
- *The effectiveness in reducing high-frequency hiss noise varies depending on the type of tape used, the recording level, and other conditions.*

⑳ PHONES jack

Connect the plug on your hedphones to this jack. To listen to a program through the headphones, set all SPEAKERS A, B and REAR switches to the OFF position.

㉑ SIMULATED STEREO switch

Press to produce a simulated stereo effect when listening to monaural souces (for example AM or TV broadcasts).

"SIMULATED STEREO" appears on the display section.

NOTE:

This effect is not produced through the surround rear speakers.

㉒ SPEAKER switches (A, B, REAR)

ON/OFF switches for the A, B and rear surround speaker systems. An indicator on the display section lights when any of these switches is set to ON.

㉓ DELAY TIME switch

Operates only when the surround mode is ON.

Switches the sorround delay time in three steps. for DOLBY SURROUND PRO LOGIC (VSX-9300S) DOLBY SURROUND (VSX-7300), 20ms is standard.

15ms → 20ms → 30ms

㉔ Remote signal sensor

㉕ VIDEO SIGNAL SELECTOR switch

When or recording simulcast programs, the recorded image can be selected from among VCR1, VCR2, VDP and TV.

VCR1 → VCR2 → VDP → TV → OFF

The current setting is shown by an indicator on the display section.

NOTE:

When using a VCR for sound recording only, follow the operating instructions of the VCR.

㉖ ACOUSTIC Switch

MEMORY:

Pressing this switch will result in the memorization of the sound quality (tone control condition). Press again to cancel this mode.

SELECT

- This switch is used to preset the five acoustic memories (A—E).
- This switch is also used to recall previously set sound quality settings. Each time you press the switch, the sound quality setting advances in the order shown below.

FLAT → LOUDNESS → A → B → C → D → E

FLAT: For flat (normal) frequency response.

LOUDNESS: Emphasizes the low- and high- frequency ranges. Produces a fuller sense of sound, particularly when listening at low volume.

A—E: Memorized acoustic memory settings.

Presetting the acoustic memory

❶ **Adjust the sound quality as desired using the BASS and TREBLE control switches.**
- ■ Settings are shown by the TONE indicator on the display section.

❷ **Press the ACOUSTIC MEMORY switch.**
- ■ The TONE indicator on the display section blinks on and off.

❸ **Press the ACOUSTIC SELECT switch and select the sign to which you wish to assign the setting (A — E).**

- The sound quality setting is memorized approximately two seconds after you last press the ACOUSTIC SELECT switch.

In this way, the desired tone will be preset in one of the five acoustic memory positions. To preset four other desired tone settings, perform the same operations.

To recall the memorized tone setttings, press the ACOUSTIC SELECT switch to select the desired memory position. In this way, five different tone settings can be preset and recalled in the five positions of the acoustic memory.

㉗ BASS control switches

Use to adjust the low-frequency level. Press the + switch to increase low-frequency level, and the − switch to decrease it.

The TONE indicator appears on the display section.

When both sides (+, −) of the BASS control are pressed simultaneously, the base response will be set to the flat (normal) condition.

㉘ TREBLE control switches

Use to adjust the high-frequency level. Press the + switch to increase high-frequency level, and the − switch to decrease it.

The TONE indicator appears on the display section.

When both sides (+, −) of the TREBLE control are pressed simultaneously, the treble response will be set to the flat (normal) condition.

㉙ TUNING switches

+: Performs tuning from the currently displayed station frequency in ascending frequency order.

−: Performs tuning in order to descending frequncies.

㉚ MEMORY SCAN switch

Operates when the INPUT SELECTOR is set to TUNER. Station frequencies assigned to the STATION CALL switches are tuned in, one after another, beginning with the current station no., for approximately 5 seconds each.

The display section SCAN indicator will light. Press the switch again and the tuner remains tuned in to the station playing when the switch was pressed the second time.

Station frequencies not assigned station numbers in the memory are skipped.

㉛ HITS (Hyper Intelligent Tuning System) switch

- If the HITS switch is pressed at the currently displayed station frequency, the receiver searches up and down the frequency for the next station (The SEARCH indicator in the display section lights at this time.) and stops at the first one it finds.
- If the HITS switch is pressed during STATION NAME input (see page 25), the receiver performs a memory search in order of ascending station number for memorized stations whose names begin with the same letter as the station just input.
- If the HITS switch is pressed during input of numbers for DIRECT ACCESS tuning, the receiver sets the remaining digits which have not yet been input to "0", searches for the corresponding frequencies, and stops on the first station it finds.

NOTE:

- *The system searches within successive 1MHz ranges for stations which can be tuned in. During DIRECT ACCESS tuning, it searches up and down for a station until it reaches the edges of the band. If no receivable station is found within the band range, the receiver returns to the state it was in before the HITS switch was pressed.*
- *If the upper (or lower) frequency limit of the receiver is encountered during HITS operation, the receiver stops searching in that direction but continues to search in the other.*

㉜ MEMORY switch

When the unit is in the frequency display mode, pressing this switch will result in the memorization of the current broadcast band, reception frequency ACOUSTIC MEMORY position, and FM AUTO/MONO mode.

This switch is also used to input station names (see page 25).

㉝ STATION NAME switch

This switch is used when inputting station names (see page 25).

㉞ AUTO/MANUAL TUNING selector switch

This switched is used to select the tuning mode. The AUTO tuning mode has been selected when the TUNING AUTO indicator ilghts.

AUTO tuning

When the − or + TUNING switch is pressed, the receiver automatically scans the broadcast station frequencies. When a broadcast is detected, the scanning stops at that frequency.

NOTE:

Pressing the TUNING switch (− or +) while scanning is taking place causes scanning to stop.

MANUAL tuning

This is the usual tuning method. Each time the − or + TUNING switch is pressed, the reception frequency is changed by one tuning step. When pressed continuously, the receiver scans the broadcast frequencies continuously.

㉟ DIRECT ACCESS TUNING switch

When this switch is pressed, the STATION CALL switches function as ten-key number switches for direct input of the desired reception frequency.

If the input station falls outside of the receiver's tuning range, the display section will display a message: "UPPER" if the frequency is too high and "LOWER" if it is too low.

㊱ FM MODE AUTO/MONO selector switch

Use to select the auto stereo mode or monaural mode when listenig to FM broadcasts. The monaural mode has been selected when the FM MONO indicator in the display section is lit.

Auto stereo mode:

Normally, leave in this mode for reception. When a stereo FM broadcast is received, it will be automatically reproduced in stereo.

Monaural mode:

When receiving distant stations or stations with weak broadcast signals, the input signal may be weak, thus resulting in increased noise during FM stereo broadcasts. In this event, setting the receiver to the monaural mode will reduce the noise. In this case, however, FM stereo broadcasts will be reproduced in monaural sound.

NOTE:

This switched has no effect on reception of AM broadcasts.

㊲ STATION CALL RANDOM 30 CH switches

- These switches are used to preset and recall desired broadcasting stations, FM AUTO/MONO mode and ACOUSTIC MEMORY mode.

  Station call operation example:

  If you press the *2 key:

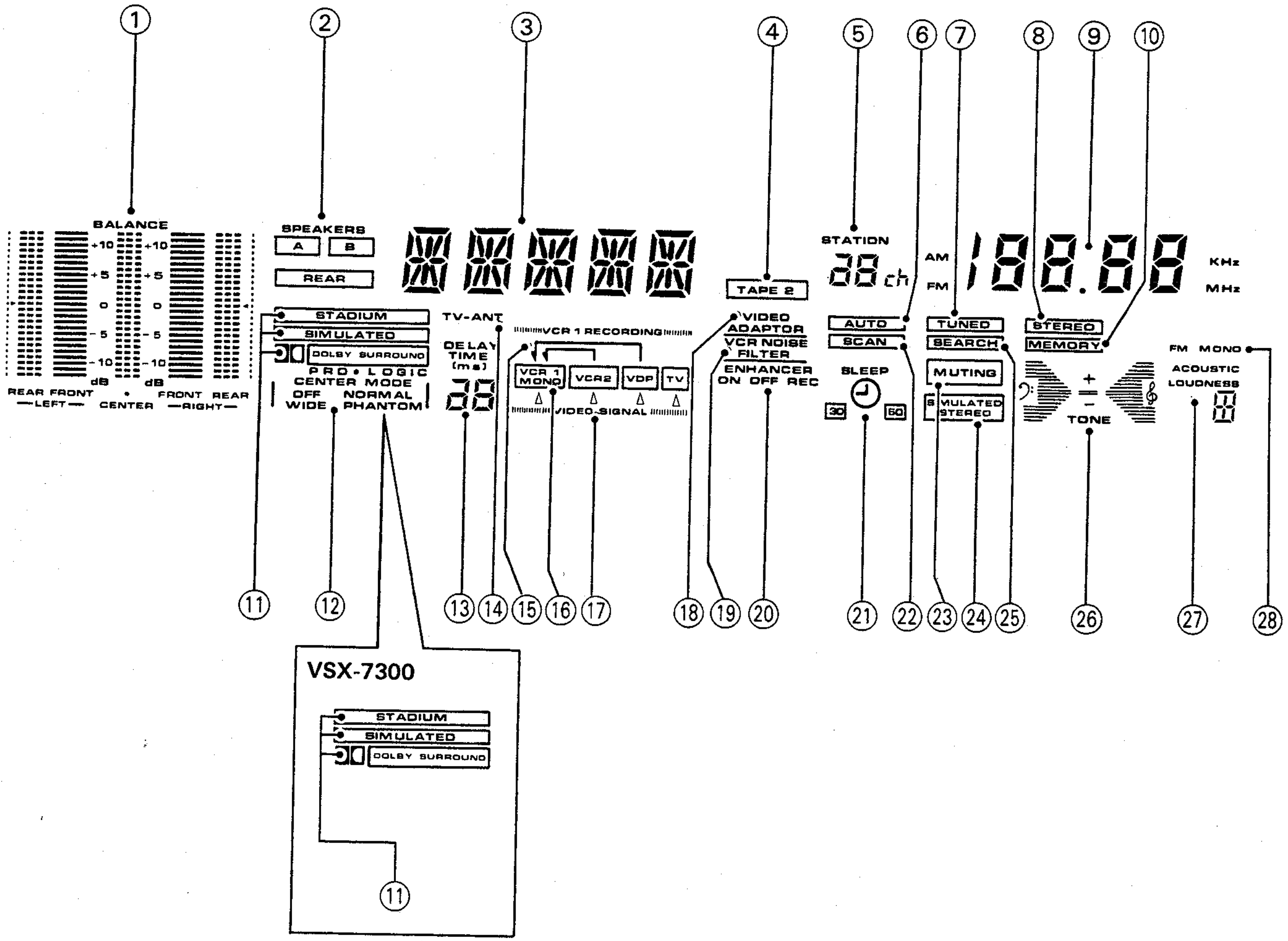
  - One time − station 2 is selected.
  - Two times − station 12 is selected.
  - Three times − station 22 is selected.

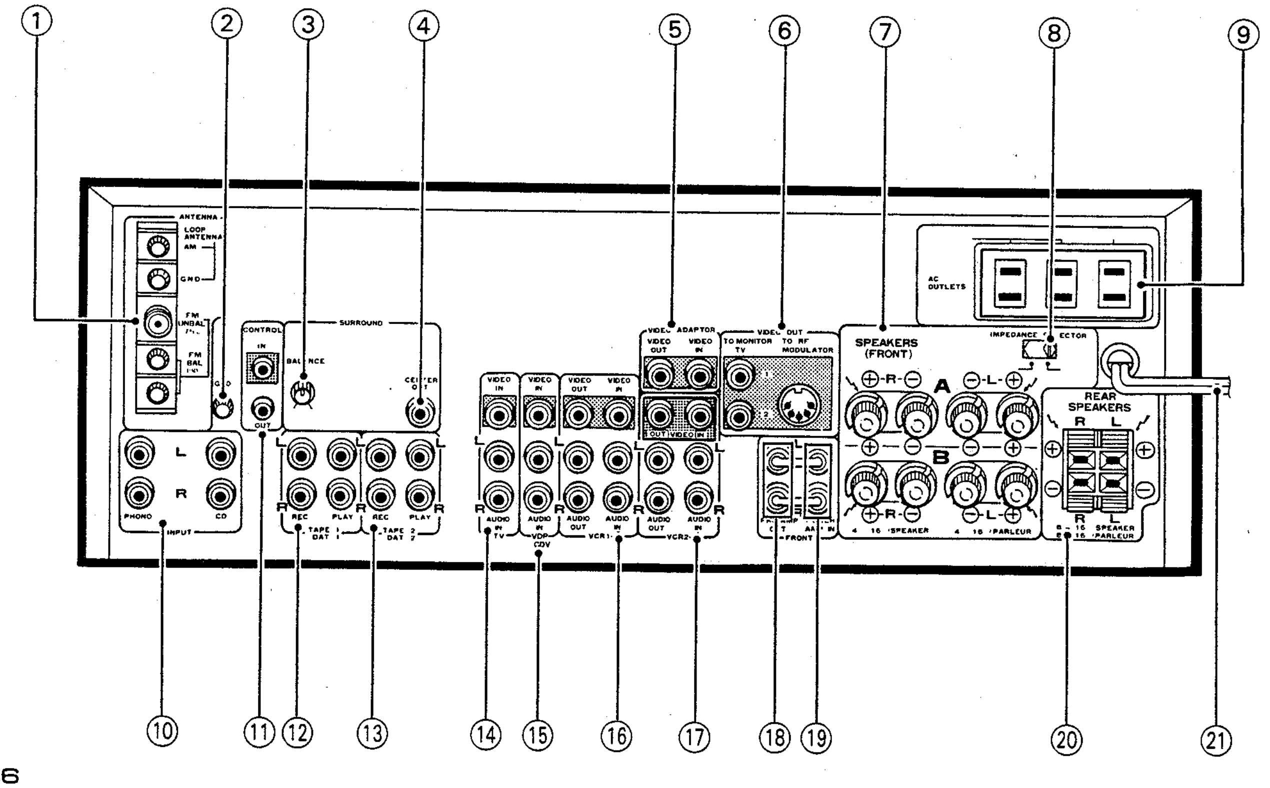
NOTE:

Pressing the STATION CALL switches when a component other than TUNER is selected causes the INPUT SELECTOR setting to switch to TUNER.

- They are also used when performing direct access tuning.

[DISPLAY SECTION]


①
②
③
④
⑤
⑥
⑦
⑧
⑨
⑩
BALANCE
+10
+5
0
-5
-10
dB
REAR FRONT
—LEFT—
CENTER
FRONT REAR
—RIGHT—
SPEAKERS
A
B
REAR
STADIUM
SIMULATED
DOLBY SURROUND
PRO • LOGIC
CENTER MODE
OFF
WIDE
NORMAL
PHANTOM
TV-ANT
DELAY TIME (ms)
VCR 1 RECORDING
VCR 1 MONO
VCR2
VDP
TV
VIDEO-SIGNAL
TAPE 2
VIDEO ADAPTOR
VCR NOISE FILTER
ENHANCER
ON OFF REC
STATION
ch
AM
FM
KHz
MHz
AUTO
SCAN
SLEEP
30
60
TUNED
SEARCH
MUTING
SIMULATED STEREO
STEREO
MEMORY
TONE
FM MONO
ACOUSTIC LOUDNESS
⑪
⑫
⑬
⑭
⑮
⑯
⑰
⑱
⑲
⑳
㉑
㉒
㉓
㉔
㉕
㉖
㉗
㉘
VSX-7300
STADIUM
SIMULATED
DOLBY SURROUND
⑪


①
②
③
④
⑤
⑥
⑦
⑧
⑨
ANTENNA
LOOP ANTENNA
AM
GND
FM UNBAL 75Ω
FM BAL 300Ω
CONTROL
IN
OUT
SURROUND
BALANCE
CENTER OUT
VIDEO ADAPTOR
VIDEO OUT
VIDEO IN
VIDEO OUT
TO MONITOR TV
TO RF MODULATOR
AC OUTLETS
SPEAKERS (FRONT)
IMPEDANCE SELECTOR
A
B
R
L
REAR SPEAKERS
PHONO
CD
INPUT
REC
PLAY
TAPE 1 DAT 1
TAPE 2 DAT 2
VIDEO IN
AUDIO IN
TV
VDP CDV
AUDIO OUT
VCR1
VCR2
FRONT
4 - 16 SPEAKER
4 - 16 PARLEUR
8 - 16 SPEAKER PARLEUR
⑩
⑪
⑫
⑬
⑭
⑮
⑯
⑰
⑱
⑲
⑳
㉑

[DISPLAY SECTION]

① BALANCE/LEVEL meters

② SPEAKERS A, B, REAR indicators
Shows which speaker system (or systems) are switched ON.

③ Alphanumeric display

④ TAPE 2 indicator
Lights when the INPUT SELECTOR is set to TAPE 2 MONITOR ON.

⑤ STATION display
Shows the channel selected with the STATION CALL switch.

⑥ AUTO indicator
Lights when the FM MODE is auto stereo.

⑦ TUNED indicator
Lights when a station is tuned.

⑧ STEREO indicator
Lights when a stereo FM broadcast is being received.

⑨ Frequency display

⑩ MEMORY indicator

⑪ Surround mode indicators

⑫ DOLBY SURROUND PRO LOGIC CENTER MODE indicators (VSX-9300 only)

⑬ DELAY TIME display
Shows the delay time during surround operation.

⑭ TV-ANT indicator
Lights when TV mode is selected with the TV ANT switch.

⑮ VCR1 RECORDING display
Displays a "↓‾‾‾|" symbol to indicate the copy mode selected with the VCR1 REC SELECTOR switch.

⑯ VCR1 MONO indicator

⑰ VIDEO SIGNAL SELECTOR indicators
Shows the video component selected with the V-SIGNAL SELECTOR switch.

⑱ VIDEO ADAPTOR indicator
Lights when the VIDEO ADAPTOR switch is in the ON position.

⑲ VCR NOISE FILTER indicator
Lights when the VCR NOISE FILTER switch is in the ON position.

⑳ ENHANCER ON, OFF, REC indicators
Shows the current VIDEO enhancer setting.

㉑ SLEEP timer indicators
Shows the SLEEP timer setting (the length of time from the set time to the point at which power will switch off) only remote control.

㉒ SCAN indicator
Lights during memory scan operation.

㉓ MUTING indicator

㉔ SIMULATED STEREO indicator

㉕ SEARCH indicator
Lights during HITS operation.

㉖ TONE level meter
Shows the settings of the BASS and TREBLE level.

㉗ ACOUSTIC display
Shows the setting of the ACOUSTIC SELECT switch.

㉘ FM MONO indicator
Lights when the FM MONO mode is selected with the FM MODE switch.

---

① FM/AM ANTENNA terminals
Use these antenna terminals for reception of normal FM and AM broadcasts.

- For details regarding antenna connection,see the section "Hints for Better Reception".

② GND terminal
Connect the turntable ground lead to this terminal.

③ SURROUND BALANCE control (DOLBY SURROUND)
[VSX-7300]
Use to adjust the surround effect from the surround rear speakers. Normally leave in the center position. When inputting a monaural signal and front speakers are OFF position, adjust so that the surround rear output is minimum.
[VSX-9300S]
Set the front panel PRO LOGIC CENTER MODE switch to the OFF position. Then adjust balance so that you hear minimum volume from the other channels.

④ SURROUND CENTER OUT jack
This is the Dolby surround center channel signal output jack. With the VSX-7300, it can also be used as a 3D [single subwoofer] system MONO output.
NOTE FOR VSX-9300S
A signal is output from the CENTER OUT jack only when the SURROUND MODE is set to DOLBY SURROUND.

⑤ VIDEO ADAPTOR jacks
Use to connect a video adaptor component such as a video enhancer or color corrector.

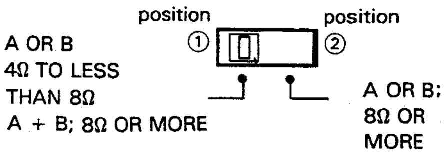
⑥ VIDEO OUT jacks
Use to connect a TV set for watching program materials from a VCR or VDP connected to this unit.
[TO MONITOR TV jacks]
Connect to monitor TV or to TV sets with video input terminals.
[TO RF MODULATOR jack]
Use to connect a conventional TV set. When performing connections, the RF MODULATOR JA-RF5 (sold separately) is required. By connecting an RF modulator, video signal can be converted to VHF signal (U.S. channel 3 or 4), thus allowing this unit to be used to view the selected source on a conventional television set.

NOTE

- *A "conventional TV set" has an antenna input terminals only.*
- *Do not allow any of the cord's conductors to protrude from the terminals or touch any other conductors. Malfunctioning or breakdowns may occur when conductors come into contact with each other.*

⑦ FRONT SPEAKERS terminals
A: Connect to a first set of speakers.
B: Connect to a second set of speakers.
Please refer to item 8. Front speakers impedance selector switch.

⑧ Front speakers impedance selector switch
Set this switch to match the impedance of your speakers.



- When using a pair of speakers:

Impedance of a speaker	Selector position
4Ω to less than 8Ω	①
8Ω or more	②

- When using two pairs of speakers:
Select ① as the selector switch position and use speakers having impedance of 8 ohms or more.

NOTE:
Turn off the receiver's power before changing the impedance selector switch setting.

⑨ AC OUTLETS

(SWITCHED) TOTAL 300W MAX
Power supplied through these outlets is turned on and off by the receiver's POWER switch. Total electrical power consumption of connected equippment should not exceed 300W.

(UNSWITCHED) 200W MAX
Power flows continually to this outlet, regardless of whether the receiver is switched ON or OFF. Electrical power consumption of the connected equipment should not exceed 200W.
The equipment should be disconnected by removing the power plug from the wall socket when not in regular use, e.g. when on vacation.

NOTE:
Do not connect appliances with high power consumption such as heaters, irons, or television sets to the AC OUTLETS in order to avoid overheating or fire risk.
This can cause the receiver to malfunction.

⑩ Audio INPUT jacks

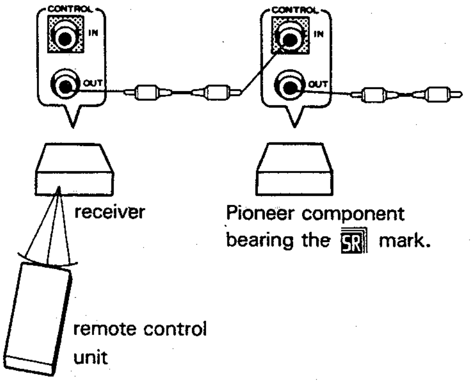
PHONO .... Connect to turntable.
CD .... Connect to compact disc player.

⑪ CONTROL IN, OUT jacks

Used for system control with other Pioneer components bearing the SR mark.

IN .... For connection from the CONTROL OUT jack of another component.
OUT .... For connection to the CONTROL IN jack of another component.

NOTE:
The receiver's remote sensor does not function when a plug is inserted in the IN jack. To operate, point the remote control unit at the remote sensor on the component to which the receiver's IN jack is connected.


CONTROL
IN
OUT
CONTROL
IN
OUT
To the CONTROL IN jack of the Pioneer component bearing the SR mark.
receiver
Pioneer component bearing the SR mark.
remote control unit

⑫ TAPE1/DAT1 jacks

Connect a DAT (digital audio tape deck) or your primary analog tape deck to these jacks.

Connecting for Recording
The tape recording jack (TAPE REC) on the tape deck or DAT should be connected to the REC side of the TAPE1/DAT1 jack on the receiver with a pin plug connecting cord.

Connecting for Playback
Connect the TAPE PLAY jack on the tape deck or DAT to the PLAY side of the TAPE1/DAT1 jack on the receiver with a pin plug connecting cord.

⑬ TAPE2/DAT2 jacks

Connect a second tape deck to or DAT these jacks.

Connecting for Recording
The tape recording jack (TAPE REC) on the tape deck should be connected to the REC side of the TAPE2/DAT2 jack on the receiver with a pin plug connecting cord.

Connecting for Playback
Connect the TAPE PLAY jack on the tape deck to the PLAY side of the TAPE2/DAT2 jack on the receiver with a pin plug connecting cord.

⑭ TV jacks

Use these jacks if wish to connect a TV tuner having both video and audio outputs.

[VIDEO IN]
Connect the TV tuner's video output to this jack.

[AUDIO IN (L, R)]
Connect the TV tuner's audio output to these jacks.

⑮ VDP/CDV jacks

[VIDEO IN]
When watching the video image from a LD player (VDP), CDV player or a VCR used for playback, connect its VIDEO OUTPUT jack here.

[AUDIO IN (L,R)]
When playing back the audio channel from a LD player (VDP), CDV player or a VCR for playback, connect its AUDIO OUTPUT jacks here.

⑯ VCR1 jacks

[VIDEO OUT]
When copying program material from the video component connected to the VCR2, VDP or TV jacks, connect to the VIDEO INPUT jack of the VCR used for recording.

[AUDIO OUT (L, R)]
When copying program material from the video component connected to the VCR2 or VDP jacks, or when recording music from an audio component source, connect to the AUDIO INPUT jacks of the VCR used for recording.

[VIDEO IN]
When monitoring the video image from a VCR used for playing, connect its VIDEO OUTPUT jack here.

[AUDIO IN (L, R)]
When monitoring the audio channnel from a VCR used for playing, connect its AUDIO OUTPUT jacks here.

⑰ VCR2 jacks

[VIDEO OUT]
When copying program materials from the video component connected to the VCR1, VDP or TV jack, connect to the VIDEO INPUT jack of the VCR used for recording.

[AUDIO OUT (L, R)]
When copying program materials from the video component connected to the VCR1, VDP or TV jacks, or when recording music from an audio component source, connect to the AUDIO INPUT jacks of the VCR used for recording.

[VIDEO IN]
When monitoring the video image from a VCR used for playing, connect its VIDEO OUTPUT jack here.

[AUDIO IN (L, R)]
When monitoring the audio channnel from a VCR used for playing, connect its AUDIO OUTPUT jacks here.

⑱ FRONT PRE-OUT jacks

When a separate power ampifier is used to drive the front speakers, connect the power amplifier to these jacks.

⑲ FRONT POWER IN jacks

When a separate pre-amplifier is connected and this unit is used as power amplifier, connect the pre-amplifier to these jacks.

⑳ REAR SPEAKERS terminals

Connect the surround rear speakers to these terminals.

NOTE:
Do not allow any of the cord's conductors to protrude from the terminals or touch any other conductors. Malfunctioning or breakdowns may occur when conductors come into contact with each other.

㉑ Power cord

13. REMOTE CONTROL UNIT LEARNING FUNCTION (Programmable remote control unit only)

Introduction

This system remote control can "learn" the commands of other remote control units, regardless of manufacturerer, as long as the other unit is of the infrared type.
In some cases you may still need the original remote control unit for special situations. But as a rule, you will be able to use this Pioneer remote for most system control needs, including video as well as audio equipment.

NOTE:
When using the "LEARN" mode it is a good idea to take the two remote control units to another room. This avoids problems such as sudden high volume output or accidental tape erasure that may occur if particular infrared command signals reach your components. Alternatively, you may wish to unplug your component system. Simply turning off the power may not be sufficient since power on/off switching may also be remote controllable.

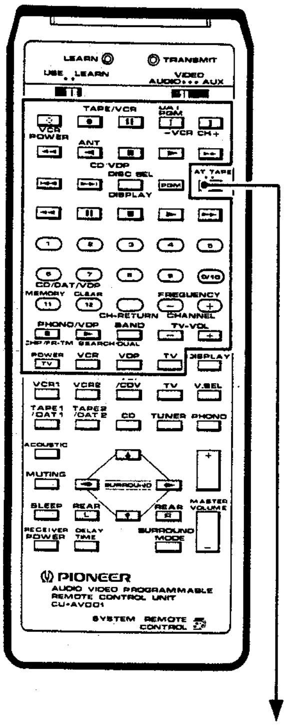
Which keys can be programmed with new commands?

There are two mode selector switches near the front end of the remote. The LEARN mode selector lets you select the USE or LEARN function. The LEARN mode allows the Pioneer remote to "LEARN" the commands of other remote control units. The USE mode allows you to use this remote control unit for operation of your system.

The keys on the remote control unit change their functions according to how the TRANSMIT mode selector is set. You can switch the TRANSMIT mode between the AUDIO, VIDEO, and AUX modes. However, the keys in the SURROUND AMPLIFIER section always have the same functions.
You can assign new commands to the keys in each of the modes. In the AUX mode, all keys are available to be programmed with new commands. In the VIDEO and AUDIO modes, all keys except the SURROUND AMPLIFIER keys can be assigned new commands.
When you first start using the remote control unit, it contains initial commands appropriate for Pioneer components (when set to the AUDIO and VIDEO modes). If your audio and video equipment consists of Pioneer components exclusively you can use the remote control unit as is. It is also possible to restore the original Pioneer commands after assigning other commands. (Refer to "Returning to the Initial Settings" for this procedure.)

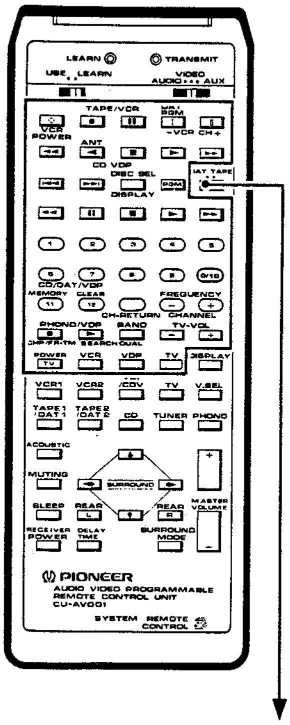
- In each mode one function per key may be programmed, for a total of up to 154 functions.
- When presetting keys, make sure that the remote control units of both this and the other component are loaded with fresh batteries.
- For some special types of infrared remote control units programming may be impossible.

AUDIO mode


LEARN
TRANSMIT
USE LEARN
VIDEO
AUDIO AUX
TAPE/VCR
DAT PGM
VCR POWER
-VCR CH+
ANT
CD VDP
DISC SEL
PGM
DISPLAY
DAT TAPE
1
2
3
4
5
6
7
8
9
0/10
CD/DAT/VDP
MEMORY
CLEAR
11
12
FREQUENCY
CH-RETURN
CHANNEL
PHONO/VDP
BAND
TV-VOL
CHP/FR-TM
SEARCH
DUAL
POWER
TV
VCR
VDP
TV
DISPLAY
VCR1
VCR2
/CDV
TV
V.SEL
TAPE1 /DAT1
TAPE2 /DAT2
CD
TUNER
PHONO
ACOUSTIC
MUTING
SURROUND
SLEEP
REAR L
REAR R
MASTER VOLUME
RECEIVER POWER
DELAY TIME
SURROUND MODE
PIONEER
AUDIO VIDEO PROGRAMMABLE REMOTE CONTROL UNIT CU-AV001
SYSTEM REMOTE CONTROL

In the AUDIO mode the TAPE function keys can be preset with new functions for the DAT position or the TAPE position.
The initial SR settings will remain in the other position (43 keys can be programmed.).

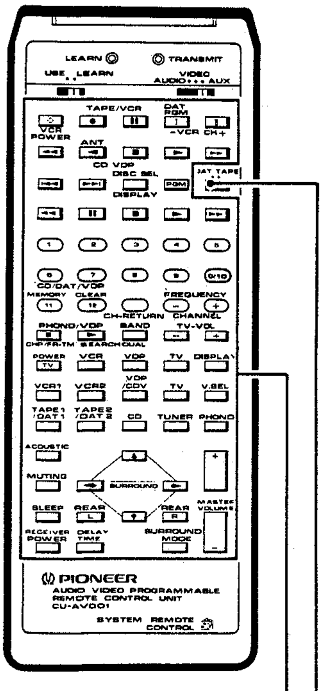
VIDEO mode


LEARN
TRANSMIT
USE LEARN
VIDEO
AUDIO AUX
TAPE/VCR
DAT PGM
VCR POWER
-VCR CH+
ANT
CD VDP
DISC SEL
PGM
DISPLAY
DAT TAPE
CD/DAT/VDP
MEMORY
CLEAR
FREQUENCY
CH-RETURN
CHANNEL
PHONO/VDP
BAND
TV-VOL
CHP/FR-TM
SEARCH
DUAL
POWER
VCR
VDP
TV
DISPLAY
VCR1
VCR2
/CDV
TV
V.SEL
TAPE1 /DAT1
TAPE2 /DAT2
CD
TUNER
PHONO
ACOUSTIC
MUTING
SURROUND
SLEEP
REAR
REAR
MASTER VOLUME
RECEIVER POWER
DELAY TIME
SURROUND MODE
PIONEER
AUDIO VIDEO PROGRAMMABLE REMOTE CONTROL UNIT CU-AV001
SYSTEM REMOTE CONTROL

In the VIDEO mode the DAT/TAPE switch is inoperative (43 keys can be programmed.).

When teaching functions whose names differ from those of the keys, write in the names or codes of the functions on the included templates and place on the panel.

AUX mode


LEARN
TRANSMIT
USE LEARN
VIDEO
AUDIO AUX
TAPE/VCR
DAT PGM
VCR POWER
-VCR CH+
ANT
CD VDP
DISC SEL
PGM
DISPLAY
DAT TAPE
CD/DAT/VDP
MEMORY
CLEAR
FREQUENCY
CH-RETURN
CHANNEL
PHONO/VDP
BAND
TV-VOL
CHP/FR-TM
SEARCH
DUAL
POWER
VCR
VDP
TV
DISPLAY
VCR1
VCR2
VDP /CDV
TV
V.SEL
TAPE1 /DAT1
TAPE2 /DAT2
CD
TUNER
PHONO
ACOUSTIC
MUTING
SURROUND
SLEEP
REAR
REAR
MASTER VOLUME
RECEIVER POWER
DELAY TIME
SURROUND MODE
PIONEER
AUDIO VIDEO PROGRAMMABLE REMOTE CONTROL UNIT CU-AV001
SYSTEM REMOTE CONTROL

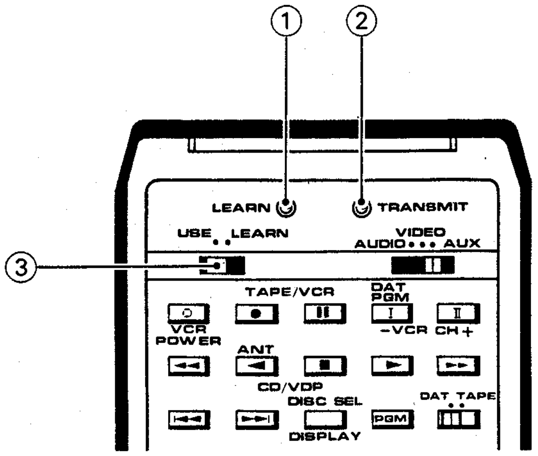
All buttons can be preset (68 keys can be programmed.).

In the AUX mode the DAT/TAPE switch is inoperative.

[Operation Example]

Using the remote control unit of your VCR to program the playback command.

- It is recommended that the name of the key and its function correspond. This is convenient when operating equipment.



① LEARN indicator

This indicator shows the remote control unit operating condition.

LIT:

Learning is possible.

OFF:

Regular remote control functions are performed.

FLASHING:

Means the key is not available for programming a new command in the current mode.

② TRANSMIT indicator

This indicator flashes when remote control signals are sent.

③ LEARN selector switch

Set as follows:

LEARN:

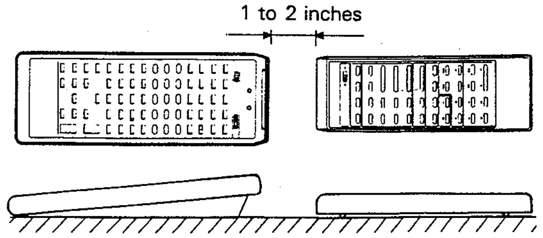
This position is used for storing the codes of your remote control unit.

USE:

Set to this position after codes have been stored in the LEARN position. Set to this position for normal operation.

[Operation example]

1. Set the LEARN switch of the programmable remote control unit to the LEARN position and set the TRANSMIT mode selector switch to the VIDEO position.
   - Programming is possible with the TRANSMIT mode selector switch in any position, but VIDEO is used as an example.
2. Place the transmission sections of the programmable remote control unit and the remote control of the VCR facing each other.



   - Place the two units on a table, separated by 2 to 5 cm (1 to 2 inches).
     Memorization will not be possible if they are too close.
3. Hold down the VCR PLAY key of the Programmable remote control unit until the LEARN indicator light up, then release the key.
4. Hold down the PLAY key of the VCR remote control unit.
5. Release the key of the VCR remote control unit after making sure that the LEARN indicator has gone out on the Pioneer remote control unit.

NOTE:

If the LEARN indicator flashes, it indicates that you are trying to preset a key not available for the learning function, or otherwise the program capacity has been exceeded, the function programmed last will not be memorized correctly. All previously programmed functions, however, will be retained in memory and may be used as they are if the last function is not essential.

6. Set the LEARN selector switch of the programmable remote control unit to the USE position.
   - The previous code (Pioneer uniform remote control code or code for other equipment) is erased and replaced by the new code.
7. Check that the program works.
   - Try actual operation and make sure the unit works properly.
   - If the VCR does not operate when pressing the key, change angle, position and distance between the remote control units and repeat the programming procedure.
   - When programming, make sure that the function indications (for example, ► , ►►, ■) on the other remote control unit and the programmable remote control unit are the same. This will facilitate operation.

Questions and Answers about the Learning Function

Q: The remote control unit of my VCR has two REC (recording) keys. They both have to be pressed at the same time to start recording. What is the learning procedure in this case?

A: Hold one of the keys on the programmable remote control depressed (for example the VCR ● key) until the LEARN indicator lights up, and then press the two keys on the VCR remote control simultaneously.

Q: The remote control unit of my VCR has a REC (recording) key and a PLAY (playback) key and they both have to be pressed at the same time to start recording. What is the learning procedure in this case?

A: Hold one of the keys on the programmable remote control depressed (for example the VCR ● key) until the LEARN indicator lights up, and then press the REC and PLAY keys on the VCR remote control simultaneously.

- As described above, operations which require two keys to be pressed at the same time are programmed by pressing the two keys simultaneously.

Operating other equipment using the programmable remote control unit

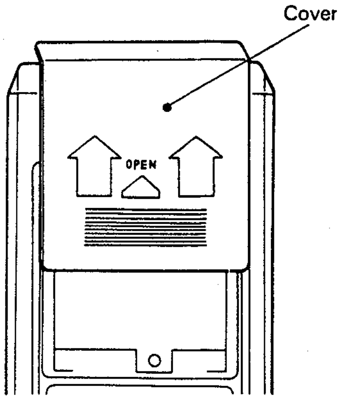
1. Set the LEARN switch of the programmable remote control unit to the USE position.
2. Set the TRANSMIT mode selector switch to the desired position (AUDIO/VIDEO/AUX).
   - Set to the VIDEO position for programming as described in the example.
3. Press the key of the desired function.
   - The TRANSMIT indicator lights up while the remote control unit is sending codes.

NOTE:

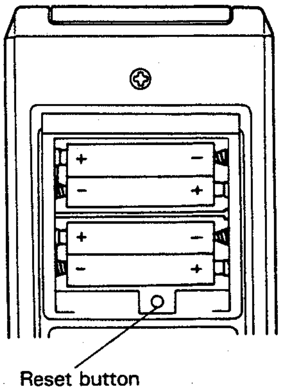
- *When operating programmed keys, always set the LEARN switch to the USE position. Operation is not possible in the LEARN position.*
- *For functions which require two keys to be pressed at the same time (recording etc.) or functions for which several codes are sent simultaneously (auto functions, timer programming, etc.) the programming procedure is different and improper operation may occur.*

Returning to the Initial Settings

1. Set the LEARN selector switch to the LEARN position.
2. Remove the battery cover.



3. Press any of the keys available for programming. The LEARN indicator will illuminate.
4. Use a ball-point pen or similar object to press the RESET key while the LEARN indicator is flashing.



- The programmed functions for the AUDIO, VIDEO and AUX positions are cleared, and the remote control unit is reset to the Pioneer uniform remote control codes.
- Press the button gently; do not use excessive force.

14. SPECIFICATIONS

Amplifier section
[POWER IN] FRONT

Continuous average power output of 125 watts* per channel , min., at 8 ohms, from 20 Hz to 20,000 Hz with no more than 0.005% total harmonic distortion.**

**Measured pursuant to the Federal Trade Commission's Trade Regulation rule on Power Output Claims for Amplifier.*
***Measured by Audio Spectrum Analyzer.*

Continuous Power Output	
1 kHz, 0.7%, 8 Ω (Rear)	30W + 30W
Dynamic Power (2 Ω/4 Ω/8 Ω)	280 W/260 W/185 W
Damping Factor	
1 kHz, 8 Ω	100
Input (Sensitivity/Impedance)	
PHONO MM	2.5 mV/47 kΩ
CD, TAPE 1/DAT 1, TAPE 2/DAT 2, TV, VDP/CDV, VCR 1, VCR 2	150 mV/47 kΩ
FRONT POWER AMP IN	1 V/47 kΩ
Phono Overload Level (T.H.D. 0.08%, 1000 Hz)	
PHONO MM	150 mV
Frequency Response	
PHONO MM	20 Hz to 20,000 Hz ±0.3 dB
CD, TAPE 1/DAT 1, TAPE 2/DAT 2, TV, VDP/CDV, VCR 1, VCR 2	5 Hz to 100,000 Hz $^{+0}_{-3}$dB
Output (Level/Impedance)	
TAPE 1/DAT 1 REC, TAPE 2/DAT 2 REC	150 mV/2.2 kΩ
VCR 1 OUT, VCR 2 OUT	150 mV/2.2 kΩ
FRONT PRE AMP OUT	1 V/220Ω
Tone Control	
BASS 100 Hz	±8 dB
TREBLE 10 kHz	±8 dB
VCR Noise Filter	100 Hz, 5 kHz: −3 dB
Loudness Contour	6 dB (100 Hz) 3 dB (10 kHz)
Signal-to-Noise Ratio (IHF, short circuited, A network)	
PHONO MM	82 dB
CD, TAPE 1/DAT 1, TAPE 2/DAT 2, TV, VDP/CDV, VCR 1, VCR 2	98 dB
Signal-to-Noise Ratio [EIA, at 1 W (1 kHz)]	
PHONO MM	77 dB
CD, TAPE 1/DAT 1, TAPE 2/DAT 2, TV, VDP/CDV VCR 1, VCR 2	80 dB
SURROUND Section	
CENTER OUT (L = R = 106 mV input) (Level/Impedance)	2 V/4.7 kΩ

VIDEO Section

Input (Level/Impedance)	
VCR 1, VCR 2, VDP/CDV, TV, ADAPTOR	1Vp-p/75 Ω
Output (Level/Impedance)	
VCR 1, VCR 2, ADAPTOR, MONITOR	1Vp-p/75 Ω
Frequency Response	
VCR 1, VCR 2, VDP/CDV, TV, ADAPTOR→MONITOR	5 Hz—10 M Hz $^{+0}_{-3}$dB
Signal-to-Noise-Ratio	55 dB
Cross Talk	55 dB (3.58 MHz)
Enhancer	2 MHz ±3 dB

FM Tuner Section

Frequency Range	87.5 MHz to 108 MHz
Usable Sensitivity	Mono; 10.8 dBf, IHF (0.95 μV/75 Ω)
50 dB Quieting Sensitivity	Mono; 15.3 dBf, (1.6 μV/75 Ω) Stereo; 37.1 dBf, (19.5 μV/75 Ω)
Signal-to-Noise Ratio	Mono; 80 dB (at 65 dBf) Stereo; 76 dB (at 85 dBf)
Distortion	Mono; 0.08% (100 Hz) 0.08% (1 kHz) 0.2% (6 kHz) Stereo; 0.2% (100 Hz) 0.15% (1 kHz) 0.3% (6 kHz)
Capture Ratio	1.0 dB
Alternate Channel Selectivity	65 dB (400 kHz)
Stereo Separation	50 dB (1 kHz)
Frequency Response	30 Hz to 15 kHz $^{+0.5}_{-2.0}$dB
Image Interference Ratio	50 dB
IF Interference Ratio	80 dB
AM Suppression Ratio	55 dB
Spurious Interference Ratio	70 dB
Antenna Input	300 Ω balanced 75 Ω unbalanced

AM Tuner Section

Frequency Range	530 kHz to 1,700 kHz
Sensitivity (IHF, Loop antenna)	300 μV/m
Selectivity	30 dB
Signal-to-Noise Ratio	50 dB
Image Interference Ratio	40 dB
IF Interference Ratio	65 dB
Antenna	Loop antenna

Miscellaneous

Power requirements	AC 120V, 60 Hz
Power consumption	550 W, 660 VA
In standby condition	3 W
AC Outlets	
SWITCHED x 2	TOTAL 300 W MAX
UNSWITCHED x 1	200 W MAX
Dimensions	420 (W) x 156 (H) x 421 (D) mm 16-9/16 (W) x 6-1/8 (H) x 16-9/16 (D) in
Weight (without package)	12 kg (26 lb 7 oz)

Furnished Parts

FM T-type antenna	1
AM Loop antenna	1
Dry cell battery	
VSX-9300S (LR03/AM-4)	4
VSX-7300 (R03/UM-4)	2
Remote control unit	1
Operating Instructions	1
Templates added (VSX-9300S only)	2

NOTE:
Specifications and the design subject to possible modifications without notice due to improvements.